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AZ CORP COMMISSION
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Transcript Exhibit(s)

Docket #(s): W-02500A-10-0382

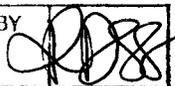
Exhibit #: JS41 - JS44, JS51, JS52,

LW1 - LW6, LW8, LW9, S1-S4

Arizona Corporation Commission

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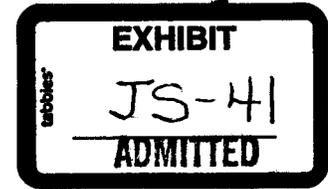
BEFORE THE ARIZONA CORPORATION COMMISSION
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COMMISSIONERS

GARY PIERCE, Chairman
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS

2011 MAR 18 P 3:27

DOCKET CONTROL



IN THE MATTER OF THE APPLICATION OF)
GOODMAN WATER COMPANY, AN ARIZONA)
CORPORATION, FOR (i) A DETERMINATION)
OF THE FAIR VALUE OF ITS UTILITY PLANT)
AND PROPERTY AND (ii) AN INCREASE IN)
ITS WATER RATES AND CHARGES FOR)
UTILITY SERVICE BASED THEREON.)

DOCKET NO: W-02500A-10 -0382
NOTICE OF SUBMITTAL OF DIRECT
TESTIMONY BY AN INTERVENOR

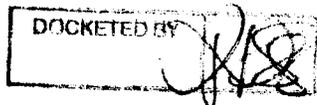
By means of this filing, James Schoemperlen is hereby submitting copies of direct testimony in opposition to the proposed increase in Goodman Water Company's water rates.

RESPECTFULLY SUBMITTED this 21st day of March, 2011.

Arizona Corporation Commission

DOCKETED

MAR 18 2011



James Schoemperlen

A handwritten signature in cursive script, appearing to read "James Schoemperlen".

39695 S. Horse Run Dr.
Tucson, AZ 85739
Phone: (520) 299-3252
E-mail: jimschoemp@comcast.net

ORIGINAL and Thirteen (13) copies of the foregoing to be filed the 21st day of March 2011 with Docket Control.

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

1 A copy of the foregoing Notice will
2 be emailed or mailed this same date:

3

4 Jane L. Rodda, Administrative Law Judge
5 Hearing Division
6 Arizona Corporation Commission
7 400 West Congress, Suite 218
8 Tucson, AZ 85701

9

10 Janice Alward, Chief Counsel
11 Legal Division
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13 1200 W. Washington Street
14 Phoenix, AZ 85007

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16 Steven Olea, Director
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BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

DIRECT TESTIMONY OF

JAMES SCHOEMPERLEN

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)

March 21, 2011

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I. INTRODUCTION, QUALIFICATIONS AND PURPOSE

Q1. PLEASE STATE YOUR NAME AND ADDRESS.

A1. My name is James M. Schoemperlen. My home address is 39695 South Horse Run Dr. Tucson, AZ 85739

Q2. DO YOU LIVE IN THE EAGLE CREST RANCH SUBDIVISION?

A2. Yes

Q3. WHAT IS YOUR PROFESSION, BACKGROUND AND EDUCATION?

A3. I am a Certified Public Accountant; I am the Corporate Controller for Sargent in Tucson which is an Aerospace Company. I have a BBA in Accounting from the University of Wisconsin. I have a Master's of Science Management from the University of Wisconsin with concentration in Finance.

Q4. AS PART OF YOUR EDUCATION, DID YOU STUDY ANY OF THE CONCEPTS OF COST OF EQUITY ESTIMATES USING DISCOUNTED CASH FLOW AND THE CAPITAL ASSET PRICING MODEL?

A4. Yes, my Master's thesis was written based on the analysis of these models.

Q5. PLEASE SUMMARIZE YOUR PRIOR WORK EXPERIENCE

A5. Brief summary as follows:

As Corporate Controller for Sargent in Tucson I have prepared numerous analysis for large capital additions including a recent significant expansion for the Tucson operations and I have led our mergers and acquisitions efforts analyzing numerous potential targets , Prior to that I was a divisional controller for Walbro Engine Management in Tucson, Prior to that I was controller for Lear Corporation in Janesville Wisconsin where I participated

in a major plant expansion using robotics and was successful in obtaining significant funding from the state of Wisconsin for that expansion, Prior to that I held various Controllershship positions with Motorola in Chicago IL and performed the analysis for major plant expansions both domestic and international , Prior to that I worked as an Auditor for KPMG, one of the largest audit firms in the world and had concentrated audit experience in both commercial manufacturing and health care.

Q6. DO YOU HAVE ANY EXPERIENCE IN REGULATED BUSINESSES?

A6. Yes, as a Senior Auditor in Charge with KPMG, I specialized in the Health Care Industry which is highly regulated through both the Medicare and Medicaid programs. Significant rate validation processes are required to participate in these programs and I prepared the analysis for KPMG's clients which included major hospitals and health care facilities.

Q7. HAVE YOU DONE ANYTHING SPECIAL TO FAMILIARIZE YOURSELF WITH THE PRICIPALS OF REGULATION IN THE WATER INDUSTRY?

A7. Yes, I have reviewed the manuals "Principles of Water Rates, Fees and Charges, manual of water supply practices M1- fifth edition" and "Water Rates, Fees, and the Legal Environment – second edition", both published through the American Water Works Association (AWWA).

Q8. CAN YOU GIVE US A SUMMARY OF YOUR CONCLUSIONS ON THE GOODMAN WATER RATE INCREASE REQUEST BASED ON YOUR FINANCIAL KNOWLEDGE AND THE REVIEW OF THESE MANUALS?

A8. Regarding the Rate Base and Rate Design - the objectives of the rate validation processes are very similar to what is performed in the health industry to validate rates. "The premise is that costs need to be allocated to customers based on the required service levels and at the rates of use the customer wants.... A sound analysis of the adequacy of charges requires

that costs be allocated among the customers commensurate with their service requirements.” (See Folder – D, P. 49, AWWA Manual – M1). The GWC - Bourassa analysis does not comply with sound analysis since there are significant portion of costs that are not allocated to the proper user base, namely future users. As indicated by AWWA Rates Fees and the Legal Environment, “Rate design concerns the manner in which individual customers, or groups of customers, are billed. Rate designs are developed to promote equity among customers by charging each customer in such a way that a customer is neither subsidized by nor subsidizes other customers. Several significant rate design issues were addressed and decided in cases such as Durant v. City of Beverly Hills (1940), Village of Niles v. City of Chicago (1980), and the City of Pompano Beach v. Oltman (1980)”. This would also include Intergenerational Rate Inequity. Since there are currently about 677 built out lots and since current **advertised** build out of the Eagle Crest Ranch subdivision is scheduled at 920 service customers and since Mr. Mark Taylor of Westland Resources, Inc. (the engineering group responsible for the design of the Goodman Water facilities) has indicated that the Water Works is designed for approximately 1,291 equivalent housing units, there is significant excess capacity that has not been accounted for in the analysis. It should also be noted that the ACC staff itself has determined that the capacity of the Goodman Water facilities is approximately 1,800 equivalent housing units (See folder – C, ACC 1800 Units_p2.pdf). It is evident that the design of the GWC-Bourassa allocation of costs includes significant intergenerational rate inequity with current users paying for the capacity requirements of future users.

Also, as pointed out by the AWWA book, “Water Rates, Fees, and the Legal Environment”, Folder-E (Reasonableness and non-discriminatory.pdf, P16), they point out that the law defines Reasonable Water rates as follows.

“Reasonable water rates are rates that are based on generating sufficient revenues to operate the water utility in a ***prudent*** [emphasis added] manner and without any undue discrimination among customers.”

They go on to discuss what is meant under the law by the term “fair and equitable rates”.

“The term fair and equitable rates [emphasis added], also called cost-of-service-based rates [emphasis added] (COS), in rate making refers to a cost causality between rates and the customer’s bill. Such rates promote each customer to pay his or her cost share of the service without being subsidized by other customers or without subsidizing other customers” [emphasis added],

As indicated on P.149 – P.150 [Folder E – Water Rates Fees and the Legal Environment] of “Water Rates, Fees and the Legal Environment”, “Prompted by customer price exploitation practices exercised by railroads that were granted franchises by the United States, federal laws were enacted to disallow utilities from exercising monopolistic pricing powers. The definition of utility was expanded from the railroad and interstate transportation industries to eventually include electric, gas, water, wastewater, telecommunications, and other utilities. The concepts of fair and just, or equitable, service rates became the principles used to fight monopolistic pricing behavior.”

Cases cited affecting Water rates and fees include:

Bluefield Water Works & Improvement Company v. Public Service Commission of West Virginia, 26 US 679 (1923) (objective of fair and reasonable rate of return); Durant v. City of Beverly Hills (objective of reasonableness and fairness)

Subsidizing customers [P.150 Rates, Fees & Legal Environment] “...include costs intended to be used to subsidize any other customer(s) or customer class. “

The AWWA book “Rates, Fees & legal Environment” on P. 152 [Folder E, Rates, Fees and the Legal Environment, Intergenerational Rate Discrimination_P152.jpg] also indicates that “Price discrimination by itself is not prohibited by law.Only unjust price discrimination is prohibited. Equitable rates by definition, are cost-based [i.e. (COS) as defined at the bottom of page

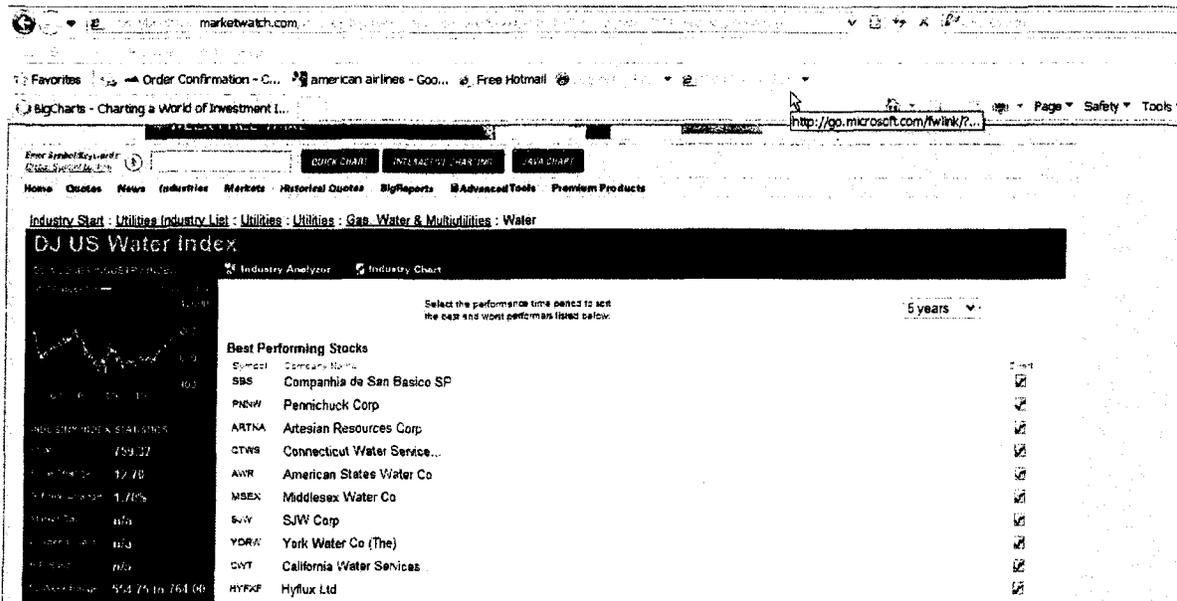
5 above] rates that avoid unjust price discrimination. Price discrimination is not only limited to interclass prices but can also occur in intra-class (for example between single-family home customers) and **inter-generational perspectives (between new users and existing users)**. “[emphasis added]

As Water Rates Fees and the Legal Environment points out Folder-E, Cost of Service.pdf on page 14, “The 2001 Colorado court ruling (Krupp v. Breckenridge Sanitation District) ... established a strong COS relationship between financial objective, such as growth-pays-for-growth and the buy-in method.” Also, as indicated at the top of page 151, Rates, Fees and the Legal Environment [Folder E, AWWA Water Rates Fees and the Legal Environment, Equal Protection_Water Pricing Legal Principals_P151.jpg,] “Equal Protection under the Law requires governments and businesses to treat persons the same way without preferential (advantageous or disadvantageous) treatment.”

Regarding Rate of Return - with the GWC/Bourassa calculations I have issues in how they apply the calculation of cost of Capital. To begin with, we must recognize that the calculations under both the Capital Asset Pricing (CAPM) and the Discounted Cash Flow (DCF) models are highly dependent on the selections used for the calculations. Additionally, Bourassa first indicates that “GWC is not directly comparable to the sample utilities.....” A22, A29, A58 but he continues on to use those companies as “Proxies” and makes calculations based off that.

One thing that Mr. Bourassa failed to mention is that of the 6 stocks he picked as comparatives and that were used in both his CAPM and DCF models, 5 were on the list of best performing stocks in the Dow Jones US Water index as listed in the site [bigcharts.marketwatch .com](http://bigcharts.marketwatch.com) and reproduced below ⁽³⁾ :

(Chart-A)



⁽¹⁾ Note that a five year review is used to be consistent with the GWC water analysis which generally uses 5 year return calculations. See Bourassa schedule D-4.9 footnote (1)

Here are the returns of the stocks picked as the Bourassa sample for the last 5 years, compared to the Dow Jones US Water Utility index and the S&P 500.

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(Chart-B)

FISHER INVESTMENTS
PRIVATIZATION GROUP

Performance Comparison
As of 3/8/2011

Index / Position	(Cumulative)	(Average)
	5 Year (2/28/06 - 2/28/11)	5 Year (2/28/06 - 2/28/11)
DJIA	27.2%	5.4%
S&P 500	15.2%	3.0%
Dow Jones US Water Utilities Index	-7.3%	-1.5%
AWR	11.5%	2.3%
WTR	-10.5%	-2.1%
CWT	-5.7%	-1.1%
CIWS	21.5%	4.3%
MSEX	19.0%	3.8%
SJW	9.1%	1.8%

Source: Thomson Reuters, Fisher Investments Research, |

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March 2011

What pops out of this comparison is that Water Utilities returns generally run below the S&P 500 and the S&P 500 returns generally run below the Dow Jones Industrial Average. Note how far above the Water Utilities Average most of the stocks picked as comparisons are. This is not an impartial analysis. Basically if the stocks are “cherry picked” to produce the desired results, we will not get a fair view of general market trends. Since the results have obviously been skewed, I would suggest that the results of all of Bourassa’s calculations here be thrown out since both his CAPM and DCF calculations are based on this sample.

In addition, as further proof that there is something significantly wrong with the analysis, the overall returns computed as a result of all of those Bourassa calculations yield a required return of 10.54%. One of the first things that should be done after performing financial analysis is to determine if the final results of the calculations make sense. Following is the return of the Dow Jones Industrials Average for the last ten years.

(Chart-C)

FISHER INVESTMENTS
PRIVATE CLIENT GROUP

Performance Comparison

As of 3/8/2011

Index / Position	(Cumulative)	(Average)
	10 Year (2/28/01 - 2/28/11)	10 Year (2/28/01 - 2/28/11)
DJIA	48.2%	4.82%

Source: Thomson Reuters, Fisher Investments Research, t
© Copyright 2011 Fisher Investments. March 2011

The Dow Jones Industrial Average represents the return from core companies of our economy and the leaders in the industry representing the companies with more risk than water utilities and the highest average returns in the market. So how do we reconcile the 4.82% return of the DJIA and the 3% return of the S&P 500 with the 10.54% return requested by

GWC? We can only conclude that there is something seriously wrong here. Bourassa's calculations do not make sense.

I will discuss more on the issue above and other objections I have to Bourassa calculations below in A-11, f.

Q9. ON WHO'S BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A9. I am testifying as an intervenor on behalf of myself in this case.

Q10. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A10. I will testify to challenge the propriety of the Goodman Water Company (GWC) adjustments to its rates and charges for water utility service as prepared and presented by Thomas J. Bourassa.

II. OVERVIEW OF CHALLENGE TO GWC'S REQUEST FOR RATE RELIEF

Q11. PLEASE SUMMARIZE YOUR OBJECTIONS TO GWC'S RATE APPLICATION

A11. Following are my objections to the GWC rate request:

- a. Proposed rates as requested by GWC are **not Reasonable and Non-discriminatory in Nature**. The issue of Unreasonableness and Discrimination are demonstrated by a projection of returns at build out based on **920 units at GWC request rates** which would be 18.5%, and **far** in excess of the 10.54% return they are requesting. The natural results to build out yield an **UNREASONABLE RETURN**. The only conclusion that can be drawn from this is if the rate request is granted the current generation of users (those who have homes now) will be paying for the future generation of users (those who will buy houses in the future). This is otherwise called **Intergenerational Rate Inequity and indicates that there is a major flaw in the rate design**. I will discuss more on Intergenerational Rate Inequity later. See Table-1 Col G and C below for comparison and (See Revenue Analysis-5 Goodman Water.xlsx, tab Results Comparison Sheet, Col G

& C, Folder James Schoemperlen Response, rows 95 through 148 Schedule reproduced below and tab "Revised Return on Equity Calc's" Table-3 reproduced below for Required Return calculations).

- b. The cost of capital at 10.54% does not make sense when compared to overall market returns and the cost of capital. I will discuss reasons for this later. Just adjusting for a cost of capital which makes sense, which I will demonstrate later, will require a cost of capital in the neighborhood of 7.16%.

If a 7.16% cost of capital were used at 920 build out under current rates requires Operating Income of \$171,655 ($\$2,397,419 \times 7.16\%$) [at 920 build out – current rates Operating income is \$247,152; the $\$247,152 - \$171,655 = \$75,497$ and $\$75,497 / \$816,248 = 9.25\%$, see col H in table 1] this leads to a 9.25% reduction in current rates.

The return requirements calculated by Bourassa leads to returns for GWC in excess of general market returns where risk is much higher (i.e. risk/return trade off - the market dictates where risk is higher returns should be higher, returns for utilities should be lower than the general market).

- c. No adjustment has been made in the calculations presented for the 920 build out level and the 1,291 to 1,800 unit capacity cited in answer A-8 above, which would represent excess capacity.
- d. GWC is requesting adjustments for Salaries and Wages for a 25% increase. This is clearly unreasonable under current economic conditions. Likewise, adjustments have been made in the GWC/Bourassa for a 148% increase in property taxes for which no reasonable substantiation was included.

e. General Discussions:

i. Table 1 below shows;

1. Col I – the returns for the test year as presented by Bourassa for comparative purposes and starting point.
2. Col G – the GWC requested rate increase
3. Col H – Returns that will be generated at build out of the 920 homes under current rates.
4. Col C – Returns at 920 unit build out if the GWC proposed rates were granted.
5. Col D – Returns that would be generated at build out if excess capacity were removed as cited in answer A-8 above were removed.
6. Col E – Adjusting for a reasonable rate of return with excess capacity removed.

(Table - 1) – Comparative returns

	Col C	Col D	Col E	Col F	Col G	Col H	Col I
34 (See Spreadsheet for Detail Calculations)							
35 Goodman Water Company	Col C	Col D	Col E	Col F	Col G	Col H	Col I
36 Comparison of Water Rates and Users							
37 Schoemperlen, Jim: from "Revised Return on Equity Calc, see F28:F31"							
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- A. Notes and conclusions regarding the columns of the analysis in Table-1.
1. Col I – As indicated these are the test year returns as indicated by GWC. Note the 3.07% return that Bourassa is calculating and claims is not a reasonable return. In A-8 Chart-B above, notice that the Water Utilities Market index is -1.5% and with a 3.07% return he is outperforming 4 out of the 6 stocks he “Cherry Picked” for his sample.
 2. Col G – GWC returns at requested rates. As indicated previously, the 10.54% request return is ridiculous.
 3. Col H – Calculations at 920 build out using **CURRENT RATES.** Note that returns at build out using the now current rates would generate a return of 10.31%, 0.23% less than his ridiculous 10.54% request and that it would take only a 0.67% increase in revenues to get to the unreasonable 10.54% return. We have made adjustment for salaries of a more reasonable 5%, instead of the 25% requested based on current economic conditions where many companies are freezing salaries and for property taxes where 148% increase was requested without reasonable evidence, in an economy where real estate prices have fallen drastically. For property taxes we allowed 5% increase. Note we have not adjusted here for a more reasonable cost of capital. **We feel the cost of capital numbers are greatly out of order and need to be adjusted now to make sure the errors are not carried over in future analysis.** If we adjust for a more reasonable cost of capital of 7.16% (this cost of capital rate will be discussed later), this would lead to a **9.25% reduction in required revenues.** Also, we believe there is a **significant excess capacity issue here that needs to**

be resolved for the same reason. The excess capacity issue will be discussed later. Also of note is the fact that at Build out, if they are essentially getting their cost of capital (which we believe is ridiculous and must be corrected), it is obvious that the GWC rates proposed are the result of Intergenerational Rate Inequity.

4. Col C – Calculation of the results of the proposed rates at build out. Notice that the return is 18.5%, far in excess of the ridiculous 10.54% return they are requesting. The only logical conclusion is that there is **significant Intergenerational Rate Inequity** built into the GWC rate request.
5. Col D – Removes the excess capacity as discussed later. This leads to a 6.7% reduction in the **CURRENT REVENUE RATES** (i.e. **not** the GWC proposed rate increase).
6. Col E – Removes the Unreasonable Return Request and replaces that with a more reasonable request (7.16%). **IT IS ESSENTIAL THAT THIS ISSUE BE ADDRESSED IN THE CURRENT CASE BECAUSE IT WILL TEND TO CREEP BACK INTO LATER RATE REQUESTS IF IT IS NOT.** To get to the 7.16% return leads to an 18.1% reduction in **CURRENT REVENUE RATES** (i.e. **not** the GWC proposed rate increase).

(Table – 2) – Adjustment for Excess Capacity

	A	B	C	D	E	F	G	H	I	J	K	L	M
2	Intervenor Analysis												
3	Goodman Water Company Capacity Unused												
4	12/20/2022												
5													
6		Phase	Date of Approval	Lot Start	Lots Included			Lot End	Sub Tot	Total Lot-Lots	Capacity Used	% Cap Used	Capacity Unused
7	I	May-02		1	218		218		218	218	100.0%	0.0%	
8	II	June-03		219	377		159		159	159	100.0%	0.0%	
9	III	April-04		378	477		100		100	100	100.0%	0.0%	
10													
11													
12		IV-A	5/2/07 Certification of Approval of Construction, 12/2/07 delivery of service	478	590		113		95	84.1%	15.9%		
13				SUBTOTAL			526		522	98.9%	1.1%		
14	Plant Added	IV-B	5/2/07 Certification of Approval of Construction, 12/2/07 delivery of service	591	617		27		24	88.9%	11.1%		
15	Plant Added	IV-C - Enclave		618	718		101		57	56.4%	43.6%		
16													
17	Plant Added	V	March 05	719	920		202		24	11.9%	88.1%		
18													
19													
20	Plant Added	Future Phase		921	961		41		0	0.0%	100.0%		
21													
22													
23	Plant Added	Unplanned Capacity		970			370		0	0.0%	100.0%		
24		Subtotal, Phase IVB, IVC, V, Future and Unplanned Capacity						741		105	14.2%	85.8%	At 1291 Units
25		Subtotal, Phase IV (Enclave only), V, Future and Unplanned Capacity						714		81	11.3%	88.7%	
26													
27													
28		Total Capacity per Engineer		1291									
29													
30													

Schoemperlen, Jim:
Although lots were sold they did not have enough pressure and added booster pumps to homes. Later added last water plant and removed booster pumps.

Schoemperlen, Jim:
Note lots 955-957 show up twice so in effect goes to 361.

Schoemperlen, Jim:
See GWC response to Intervenor 3rd Data request 3.01-Appendix A, Folder C Equivalent Housing Units, file GWC Response to Intervenor DR 3.pdf

(Source Folder, James Schoemperlen Response, Lot Information Summary2.xlsx)

f. Discussion of Excess Capacity - Important to the facts of this analysis is that the service area Phases I, II, III and IV-a (In Table -2 above) had water service which included sufficient fire flow before the capital additions in 2008. This is verified by, response from GWC to the intervenors 3rd set of data requests question 3.02 wherein we are requesting verification of water service to phase IV-A and IV-B and GWC indicates that service was first delivered on 2/22/07 [We believe that after the fact GWC found they had insufficient water pressure to service lots IV-C, which were built on a steep incline, since all houses built there initially had individual booster pumps before the new water plant capacity in 2008 was added, and they

were later removed]. We also know that Certification for Approval of Construction was granted on 5/2/07 (If approval is granted they must have appropriate water delivery and Fire Flow).

As further evidence that the 2008 addition was not useful to the entire water system, a letter from the Arizona Corporation Commission found that "... Water Plant No. 3 site consisting of a 340,000 gallon storage tank and a booster system will serve only a portion of the water system". See Folder-C Equivalent Housing Units ACC 1800 Units_p2.pdf (second paragraph) and See Table-2 "Lot Information Summary.xlsx Workbook, Summary Capacity Usage worksheet", reproduced above.

As previously discussed, GWC has excess capacity. If we remove that excess capacity based on the 1291 equivalent housing unit capacity (85.8% unused capacity for the GWC addition in 2008 – see Table 2 above) indicated by Westland Resources in intervenors 3rd set of data requests, Folder D, Other Information, "GWC Response to Intervenors DR 3.pdf, question 3.01, Folder D Other Information, img013 to 016.jpg) per Table 1 above cell D107 we would have a 6.7% reduction in current revenue rates. Additionally, the Arizona Corporation Commission granted approval for expansion of the Goodman Water Works Facility to a total of 1750 equivalent units , see ACC Docket NO. W-02500A-05-0443, Decision No. 68444. Dated Feb 02, 2006 attached in Folder-H, Goodman Water Expansion Plans, paragraph 13. Although the order above was cancelled through request of Goodman Water on April 2, 2010 Docket No. W-02500A-05-0443, [See Folder H, Expansion West of Oracle.pdf and ECR West Cancel 040210.pdf] there is evidence that the water facility actually was increased to an 1800 Equivalent Unit Capacity as indicated by the letter dated 9/2/2010 by Mr. Steven M. Olea, Director Utilities Division ACC (See Folder C, Equivalent Housing Units, ACC 1800 Units_p2.pdf).

- f. Folder - A shows that the rates requested by GWC are **unjust and unreasonable in their consequences** by comparing the rates that result with rates of surrounding areas. See Folder A, 2009RateStudy.pdf, pages 14 through 22 and Rate Comparison Calculations.xls. This study, prepared by the “Water Infrastructure Finance Authority of Arizona” based on 2009 monthly rates and average usage/month of 7,500 gallons indicates that Goodman Water had the dubious distinction of being in the top 3.1% of billing rates (\$78.69) in the state of Arizona. If the rate increase request is granted the average cost of the monthly bill for 7,500 gallons of usage will go to \$122.36 and will result in Good Water Rates being the **second highest in all of Arizona.**
- g. GWC is not earning their expected returns because it has not been prudent in its management of the company. This is demonstrated by GWC’s response to the Wawrzyniak/Schoemperlen second set of data requests question 2.15 where the following question was asked:

Q. Please provide a copy of all financial analysis Goodman Water Company performed for construction of additions to Goodman water plan, equipment and infrastructure.

A. The Company has not prepared any “financial analysis” for construction of additions to Goodman Water Company water plant other than schedules for the costs of plan additions, depreciation schedules, and sources of funding which have been provided.

As indicated on page 11 & 12 of “Water Rates, Fees and the Legal Environment”, [Folder E-Water Rates, Fees and the Legal Environment, Reasonable Return.pdf (for page 11) and AWWZ Rates Fees and the Legal Environment P12.jpg (for page 12)], which cites the case Bluefield Water Works & Improvement Company v. Public

Service Commission of West Virginia, 262 US 679 (1923), "The return should be reasonable, sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties". The major corollary to the return issue requires that the utility be managed efficiently and economically. In other words, without efficient and economical management, the utility would not automatically earn a reasonable return.

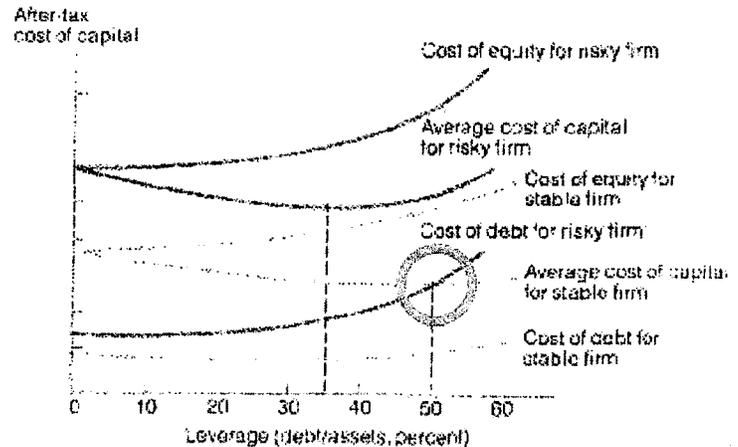
As indicated by various articles in Folder-B (i.e. Wall Street Journal etc.), the housing bubble had burst in 2006. If GWC had been prudent and conducted appropriate capital financial analysis, the \$1,737,362 capital addition in 2008 would never have been made, and no new rate adjustments would have been required. So GWC has decided to pursue a rate increase, in effect a BAILOUT due to their excessive risk taking and imprudence. See Folder-B Burst of Housing Bubble articles "the-housing-bubble-starts-burs.pdf" and "Wall Stree Journal - Housing Bubble.pdf"

- h. GWC has significant unused capacity as indicated in answer A-8 above. The lot information summary worksheet [table 2 above] shows the phases of addition to the GWC waterworks. Prior to the 2008 addition of capacity for water plant #3, Phases I, II and III were complete and receiving water services and fire flow protection. In fact, based on when owners took possession of homes in Phase IV-A and IV-B, there must have been adequate water services and fire flow protection from the existing system for those two phases as well or homes could not have been sold in those phases [again, we believe after the houses in Phase IV-B were built, GWC found they lacked enough water pressure and required booster pumps until the 2008 addition was built]. However, if we take all of Phase IV B&C, V, the Future phase - (homes 921 to 961) and "Unplanned" capacity

(1271 homes less the planned phases) and allocate the GWC water plant #3 addition to that and compare the unconnected lots to the total number of lots for those phases, we see that the unused capacity is 85.8%. See workbook Lot Information Summary2.xlsx Summary Capacity Usage tab. Workbook "Revenue Analysis-5 Goodman Water.xlsx, tab Results Comparison Sheet" column D (and the schedule presented above) shows the results of removing 85.8% of Plant Added in 2008 for GWC plant #3. The effect of removing the excess capacity would lead to a **6.7% decrease in current metered revenue requirement** (i.e. Metered Revenue Col D divided by Metered Revenue Col I).

- i. **THE COST OF CAPITAL DISCUSSION** - Capital Structure minimizing cost of Capital. As indicated in the Weston and Brigham, managerial finance book page 712, a stable company will minimize its cost of capital if it strives for approximately a 50% debt/equity ratio (see reproduction below). As indicated in Bourassa's own testimony, A26 PP17-18, the companies picked in the sample had a debt to equity ratio of 50%. But Bourassa ignores this fact and seems to use only the arguments that promote the results he wants. There is a reason for the 50% debt/equity ratio in the sample as indicated in the Weston and Brigham excerpt. This is where a stable company will minimize its cost of capital. My re-work of the cost of capital calculations in Table-3 above allows some latitude by requiring only a 40%, debt to equity ratio. Clearly it is important for management to use leverage to minimize total cost of capital in the **prudently** run firm.

Figure 19-5
Hypothetical Cost of
Capital Schedules for
High-risk (R) and Low-
risk (S) Firms



GWC is improperly setting their target Capital Structure as indicated above they should use at least a 40%/60% allocation of debt and equity to minimize overall capital costs. Current Composite Corporate Bond Rates averages per the IRS are running in the 5.49% to 6.10% range (See folder G, Cost of Capital, Corp Bond Rates.pdf).

However, the Water Infrastructure Finance Authority (WIFA) of Arizona has borrowing rates substantially below this and is currently running at 3.68%. WIFA Loan Rates.pdf.

It should be noted that the debt that GWC did acquire was acquired at 8.5% and was borrowed from EC Development. The President of EC Development is Alexander Sears who is also Chairman and CEO of GWC (see folder G, Cost of Capital, GWC - Promissory Note to Goodman Ranch Associates.pdf). GWC was asked in the Wawrzyniak / Schoemperlen second set of Data Requests, question 2.11 whether or not they had sought to borrow funds from WIFA and indicated that the decision was made to not file a loan application. They listed a number of reasons for not doing so including WIFA plant reserve requirements, WIFA debt reserve requirements, potential for restrictions on issuing dividends, encumbrance of water plant assets, cost for accounting /legal engineering costs related to WIFA

financing, and a “Buy America” stipulation. Notice that they did not indicate for the GWC loan payable that they currently have payable to EC Development that Alexander Sears is President of EC Development and that Alexander Sears is also chairman, CEO and principal shareholder of GWC and that the loan was made at a rate significantly higher than the WIFA rates at that time, calculated at between (Prime x 95%) or 5.7%. This is not **PRUDENT** management and is highly questionable [See Folder G, Folder WIFA Loans, 2008 Prime Rates.jpg and WIFA Subsidy Rate 2008.jpg].

In question 2.15 of the intervenors 2nd set of data requests, the question was asked “Please provide a copy of all financial analysis Goodman Water Company performed for construction of additions to Goodman water plant, equipment and infrastructure”. Their answer was “The Company has not prepared any “financial analysis” for construction of additions to Goodman Water Company water plant other than schedules for the costs of plant additions depreciation schedules, and sources of funding which have been provided.” If they haven’t prepared any analysis, how do they know that the approximate 4% interest rate difference is offset by the other perceived costs. Again, this is further evidence that management is **not prudent in management of the company.**

If GWC has their hands in their customers pockets to pay their costs they have an obligation to reach a more reasonable allocation between debt and equity which lowers the overall costs of capital and acquire debt at the best rates available.

(Table - 3) – Calculation of the Cost of Capital

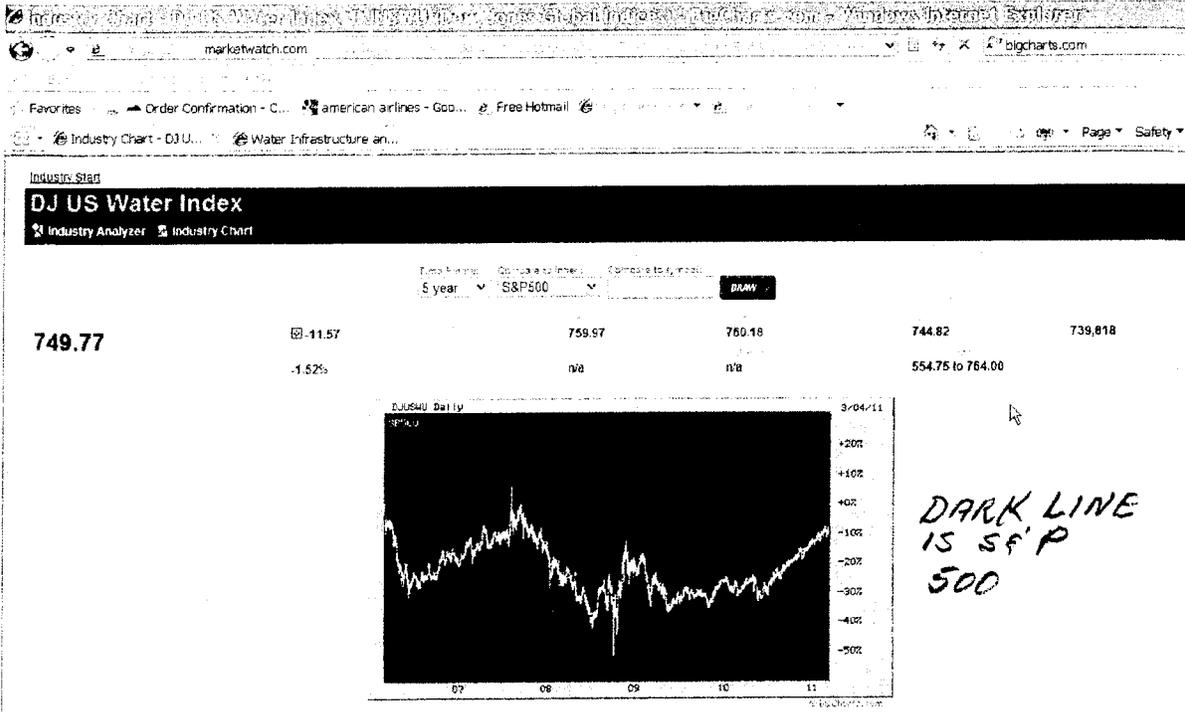
1										
2	Goodman Water Company			Goodman						
3	Required Return			Water						
4		<u>Current Equity</u>	<u>Proportion</u>	<u>Interest Rate</u>	<u>Requested Return</u>	<u>Adjusted Proportion</u>	<u>Interest Rate</u>		<u>Adjusted Equity</u>	
5		\$ 507,451.00	18.32%	8.50%	1.56%	18.32%	8.50%	1.56%	\$ 507,451.00	
6	Long Term Debt, 1st Issue									
7	Long Term Debt, 2nd Issue		0.00%			21.68%	3.68%	0.80%	\$ 600,392.48	
8										
9	Common Equity	\$ 2,261,887.00	81.68%	11.00%	8.98%	60.00%	8.00%	4.80%	\$ 1,661,600.80	
10		\$ 2,769,338.00			10.54%	100.00%			\$ 2,769,446.28	
11					(a)			(b)		
12	Current Rate Base	\$ 2,397,419.00	(d)							
13	Proposed required income	\$ 252,687.96	= (a) X (d)							
14	Proposed required revenue	\$ 863,834.96								
15										
16										
17										
18										
19	Adjusted Rate Base	\$ 2,397,419.42	(a)							
20	Less Unused portion of Phase IV plant addition:	\$ (1,490,663.46)								
21										
22										
23										
24	Net Adjusted Rate Base	\$ 906,755.96	(f)							
25										
26										
27	Revenue Requirements	<u>Cost of Cap Adj.</u>		<u>Only</u>	<u>Excess Capacity</u>					
28	Revised Required Operating Income	\$ 64,878.61	= (b) X (f)	\$ 95,572.08	= (a) X (f)					
29	Operating Expenses	\$ 229,446.80		\$ 229,446.80						
30	Taxes	\$ 3,407.51		\$ 36,453.60						
31	Depreciation	\$ 173,908.85		\$ 173,908.85						
32		\$ 471,641.76		\$ 535,381.33						
33										
34	Interest Expense	\$ 59,435.44		\$ 37,341.00						
35										
36										
37										
38										
39										
40										
41	Results Comparison Sheet Revised Return on Equity Calc's									

Schoemperlee, Jim:
Per WIFA curedly
available rates. See
Folder G, Cost of
Capital, WIFA Loan
Rates

My analysis in Table -3 above uses the 3.68% cost for new debt available from WIFA [Folder G, Cost of Capital, Current WIFA Rates.jpg] and uses the conservative 40%/60% allocation which lowers the cost of capital.

- j. Cost of Equity. After citing the issues with the Bourassa cost of capital calculations above, we note that if the analysis produces results which do not make sense, we need to question the overall validity of the methods employed.

Following is a comparison of the returns for the market on the S&P 500 compared to the DJUSWU (Dow Jones US Water Utility Index) for the last 5 years. We can see that the returns for S&P 500 for the last 5 years are greater than the DJUSWU index.



Also, following are the average returns for the S&P 500 Index over both a 5 yr and 10 yr period.

Total Returns %							Data through 03-04-11	
								YTD
S&P 500 Index	15.06						5.42	
Trailing Total Return	1 Month	3 Month	1 Year	3Yr Avg	5Yr Avg	10Yr Avg	YTD	
S&P 500 Index	1.00	8.38	20.01	2.14	2.67	2.62	5.42	

S&P 500 Index data: S&P 500 Copyright © 2006

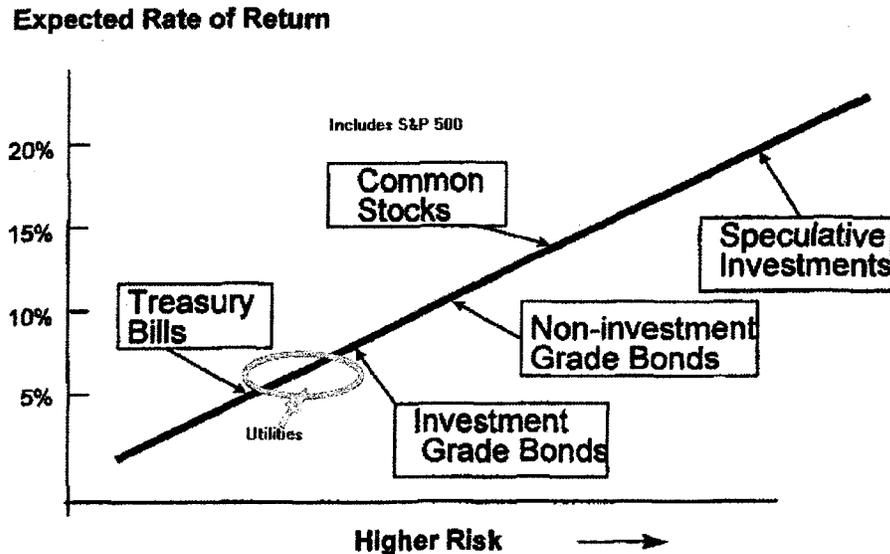
Since the 5/10 year S&P 500 average historical return over the last 10 years is 2.67% and since as indicated above the index outperforms the Dow Jones US Water Utility index, we know that if there weren't already anomalies built into the rate setting process, GWC should be

earning less than the 2.6% return **and their return for the test year was 3.07%.**

Note that Utilities are generally referred to as “Widows and Orphans Stocks” because they are stable, less risky and generally have higher dividends (See Folder G, “Widows and Orphans.jpg and Wallstreet-Widows and Orphans.jpg”) then common stocks. As such, Widow and Orphans stocks should underperform the S&P 500 on average due to less comparative risk than common stocks and we see from the graph above this is true. If you take more risk you require a larger return. Bourassa goes through a litany of risks associated with the Utility industry but there is one very important risk that he has failed to mention the effects of, and that is **COMPETITION SINCE THEY HAVE A MONOPOLY IN THEIR MARKET.** In each utilities market they do not face competition and when the utility does not feel it is achieving a “Fair Return”, they go back to the rate setting governmental body and ask for more money. This has a very stabilizing effect on the stock and the risk is much less. Over time, the government has realized there is the potential for abuse of the system and has set up organizations such as the Arizona Corporation Commission to oversee the process and interject fairness.

On page 137 of the Bourassa analysis in the application for the rate increase, reproduced below is the Capital Market Line which defines risk return trade off. Note that he included Speculative Investments, Non-investment Grade Bonds (Junk Bonds) and Investment Grade Bonds, ***all of which have an underlying company which does not have a monopoly position in its marketplace.*** There is one grade of special investments he has not placed on the graph, Utilities.

The Capital Market Line (CML)



Utilities have more risk than treasury bills and less risk than Investment Grade Bonds because they exist in a monopoly market where their return is assured as long as they are **PRUDENT MANAGERS**. Notice the range of returns expected, that is an accurate depiction of what would be experienced by a Utility.

Schedule A-1 of Page 1 one of the Bourassa analyses however shows that GWC is currently earning 3.2%, even after the significant plant expansion that caused the dip in returns. What explains this anomaly? Bourassa had calculated the required GWC rate of return previously, requesting the same 10.5% return on rate base requested here. Although the commission cut that back to 9.3%, it is clear that that the effect of Bourassa's skewed samples has not been completely removed.

On page 29, A41, Bourassa calculates the DCF model using the average projected growth rate of 3.67% and determines that DCF return is between 7% to 7.4% and remember he is doing that without

the capital lowering effects of an appropriate balance between debt and equity. We remember that rate setting requires prudent management in all aspects including the use of leverage to lower the overall cost of equity. Also, remember that Bourassa has come up with these calculations using a stacked deck, as pointed out previously. He then indicates that the return is at or below the projected cost of investment grade bonds which makes sense because those bonds have an underlying risky investment, namely a company which must compete in the marketplace. Remember that he also has give us no convincing evidence that this return is in fact below the return of investment grade bonds through independent verification, even though we have already indicated that this would be OK if it were true but it isn't **AS THE SCHEDULE BELOW SHOWS, THE 7% TO 7.4% HE CALCULATED ACTUALLY WAS ABOVE THE BOND RETURN FORECAST.** Reproduced below is the analysis from Portfolio Solutions Group that shows the forecast for these long term and short term bonds (See Folder-G, Portfolio Solutions 30 year market forecast.pdf).

(Table – 4)

Thirty-Year Estimates of Bonds, Stocks and REITs Assuming a 2.8% Inflation Rate

Asset Classes	Real Return	With 2.8% Inflation	Risk*
Government-Backed Fixed Income			
U.S. Treasury bills (1-year maturity);	0.3	3.1	2
10-year U.S. Treasury notes	1.3	4.1	6
20-year U.S. Treasury bonds	1.5	4.3	7
20-year inflation protected Treasury (TIPS);	1.8	4.6	8
GNMA mortgages	1.8	4.6	8
10-year tax-free municipal (A rated);	1.5	4.3	7
Corporate and Emerging Market Fixed Income			
10-year investment-grade corporate (AAA-BBB);	2.4	5.2	9
20-year investment-grade corporate (AAA-BBB);	2.5	5.3	10
10-year high-yield corporate (BB-B);	4.0	6.8	15
Foreign government bonds (unhedged);	2.0	4.8	8
U.S. Common Equity and REITs			
U.S. large-cap stocks	5.0	7.8	19
U.S. small-cap stocks	6.0	8.8	22
U.S. micro-cap stocks	7.0	9.8	25
U.S. small-value stocks	8.0	10.8	27
REITs (real estate investment trusts);	5.0	7.8	19
International Equity (unhedged)			
Developed countries	5.0	7.8	19
Developed countries small company	6.0	8.8	22
Developed countries small value companies	8.0	10.8	27
All emerging markets including frontier countries	9.0	11.8	29

*The estimate of risk is the estimated standard deviation of annual returns

Since there is no good analysis for deleting the 7% to 7.4% DCF calculation for equity which was presented other than the “Cherry Picking” already mentioned and, I have included that as the equity cost of capital calculation and have arrived at a cost of capital of 8% for EQUITY after adding the ~1% company specific risk (which is highly subjective). Although we did not go through an averaging

method to include the other methods of calculation in this process, we need to remember that all of this analysis is highly skewed towards increased cost of capital anyway due to the method of “Cherry Picking” used for the sample utilities. Next I used the effects of reasonable Leverage (remember 40% which is lower and more conservative than the 50% Bourassa found his sample group was using) to lower the cost of capital, which any **PRUDENT** management would do and came up with an overall weighted cost of capital of 7.16%. My analysis is presented based on this cost of capital in Table 1, Column E only. Other columns in Table 1 are based on the 10.54% request or as presented in the Bourassa analysis.

Since I believe the Bourassa analysis is flawed, based on their desired results (a random sample of water utility stocks based on performance of the index would be more appropriate), it is likely that the real cost of capital should be somewhere in the 6% range.

- k. After adjusting for the excess capacity and properly adjusting the cost of capital, the calculations show a reduction IN CURRENT REVENUE RATES (NOT AN INCREASE) of 16.3%. See Revenue Analysis-5 Goodman Water.xls , row 102 Column E, also presented in the schedule above.
- l. Other issues with the GWC/Bourassa calculations of cost of capital include:
 1. Proxy for Beta of GWC is highly skewed due to sample selected, Bourassa A45.
 2. Bourassa discusses a number of risks the small company faces, but he does not address the rather large advantage of monopolistic power in the marketplace which most likely offsets the other risks.
 3. In A29, Bourassa states that “Bluefield Water Works require the use of comparable companies”, but then he does not use them, negating the validity of his analysis.

4. Bourassa indicates in A27, that the "...lack of financial flexibility increase risk because it has no choice but to rely onWIFA loans". As indicated previously, this is an advantage because the rates are significantly below current debt rates.
5. Bourassa never addresses the advantages of leverage and explores the opportunity to reach a levered capital structure to reduce the cost of equity.
6. As indicated in A19 from the Bourassa report, Bluefield Water Works requires "efficient and economical management" in order that fair returns be realized.
7. In A18, page 12, Bourassa indicates "An important component of financial risk is construction risk. Construction risk refers to the magnitude of a company's capital budget. If a company has a large construction budget relative to internally generate cash flows it will require external financing". He does not indicate however the fact that no analysis was performed prior to expansion of the GWC plant and equipment and that the company has not been prudent in its expansion efforts.
8. In A13, page 8 of Bourassa answers, he indicates the fact that the Economy had slowed with negative growth in the last quarter in 2007. GWC as indicated previously pushed ahead in its expansion.

III. SUMMARY OF SCHEDULES

- a. Folder-A Rate Comparison to Surrounding Areas**
- b. Folder-B Burst of Housing Bubble**
- c. Folder-C Equivalent Housing Units**
- d. Folder-D Other Information**
- e. Folder-E AWWA Manual – Water Rates, Fees and the Legal Environment.**
- f. Folder-F Average Market Returns**
- g. Folder-G Cost of Capital**
- h. Folder-H Goodman Water Expansion Plans**

APPENDIX - A

*FOLDER-A, RATE COMPARISON TO
SURROUNDING
AREAS*

Water Infrastructure Finance Authority of Arizona



2009

Water and Wastewater Residential Rate Survey for the State of Arizona

Water Infrastructure Finance Authority of Arizona
1110 West Washington, Suite 290
Phoenix, Arizona 85007
Telephone: 602.364.1310
Toll Free: 877.298.0425
Website: www.azwifa.gov

ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
303 DWID	26	\$41.50
A. Peterson Water Co.	46	\$31.90
Abra Water Co. Inc.	625	\$30.14
Adaman Mutual Water Co.	261	\$15.50
Aguila Water Services, Inc.	319	\$49.48
Ajo DWID	142	\$47.30
Ajo Improvement Co. - Water Div.	1,117	\$30.09
Alpine Water System, Inc.	205	\$55.55
American Ranch DWID	NR	\$53.20
Antelope Lakes Water Company	2	\$30.00
Antelope Run Water Company	245	\$7.50
Antelope Water Company	63	\$21.25
Antelope Water Company - Yarnell	237	\$92.53
Anway Marville LLC Water Co.	240	\$56.25
Apache Junction Water Utilities CFD	3,748	\$40.04
Appaloosa Water Company	236	\$41.25
Arivaca Townsite Coop Water Co.	123	\$12.38
Ashcreek Water Company	105	\$35.03
Ashfork Water Service	212	\$41.04
Aubrey Water Company	333	\$27.88
Avondale	22,892	\$17.88
Ava Water Cooperative, Inc.	2,556	\$44.79
AZ -American Water Co. - Agua Fria	36,453	\$31.71
AZ -American Water Co. - Anthem	8,615	\$32.13
AZ -American Water Co. - Havasu	1,637	\$43.43
AZ -American Water Co. - Mohave	15,666	\$17.24
AZ -American Water Co. - Paradise Valley	4,770	\$33.53
AZ -American Water Co. - Sun City	22,768	\$16.13
AZ -American Water Co. - Sun City West	15,379	\$34.77
AZ -American Water Co. -Tubac	587	\$43.90

System Name	Number of Users	Total \$ /Month /7,500 Gals
AZ Water Company - Ajo	679	\$59.29
AZ Water Company - Ajo Heights	688	\$59.29
AZ Water Company - Apache Junction	19,257	\$34.06
AZ Water Company - Bisbee	3,410	\$35.78
AZ Water Company - Casa Grande	22,585	\$24.36
AZ Water Company - Coolidge	4,582	\$24.37
AZ Water Company - Lakeside	4,956	\$49.24
AZ Water Company - Miami	3,030	\$38.99
AZ Water Company - Oracle	1,526	\$56.70
AZ Water Company - Overgaard	4,123	\$51.85
AZ Water Company - Pinewood	2,879	\$48.14
AZ Water Company - Rim Rock	1,226	\$51.58
AZ Water Company - Saddlebrook	51	\$45.75
AZ Water Company - San Manuel	1,496	\$43.25
AZ Water Company - Sedona	6,309	\$31.36
AZ Water Company - Sierra Vista	2,915	\$27.49
AZ Water Company - Stanfield	204	\$37.42
AZ Water Company - Superior	1,283	\$35.80
AZ Water Company - White Tank	1,880	\$38.16
AZ Water Company - Winkelman	160	\$21.47
Baca Float Water Company	271	\$29.50
Bachmann Springs Utility Company	2	\$38.75
Beardsley Water Company, Inc.	423	\$37.21
Beaver Dam Water Company, Inc.	303	\$26.25
Beaver Valley Water Company, Inc.	192	\$13.65
Bella Vista Water Company, Inc.	8,520	\$25.00
Bellefont Water Co.	5	\$42.83
Benson	1,914	\$20.50
Bermuda Water Company	7,672	\$20.99
Berneil Water Company	529	\$8.20



ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month 7,500 Gals
Biasi Water Company, Inc.	149	\$37.50
Bidegain Water Company	NR	\$19.73
Big Park Water Company	3,022	\$33.34
Black Canyon DWID	830	\$35.00
Blue Hills No. 3	64	\$41.25
Bonita Creek Water Co.	43	\$86.00
Bowie DWID	350	\$35.00
Boynnton Canyon Enchantment HOA	101	\$53.63
Bradshaw Mountain View Water Co.	575	\$32.92
Bradshaw Water Company, Inc.	168	\$71.13
Brooke Water LLC - Holiday Harbor	222	\$46.38
Brooke Water LLC - Lakeside	851	\$46.38
Brooke Water LLC - Marina Village	226	\$46.38
Brooke Water LLC - Movalya Keys	551	\$46.38
Brooke Water LLC - Parker Dam	187	\$46.38
Brooke Water LLC - Payson	1,118	\$34.19
Brooke Water LLC - Pine Water Co.	2,011	\$52.88
Brooke Water LLC - Rio Lindo	31	\$46.38
Brooke Water LLC - Strawberry Water Co.	1,062	\$52.88
Brooke Water LLC - Tonto Basin	799	\$30.36
Brooke Water LLC - Parent Co.	2,182	\$46.38
Buckeye (Sundance)	incl	\$34.78
Buckeye (Sunora)	incl	\$17.43
Buckeye (Town)	10,998	\$31.82
Caballeros Water Company, Inc.	50	\$15.50
Cactus-Stellar Limited (May-Sept)	16	\$34.50
Cactus-Stellar Limited (Oct - April)	16	\$22.50
Camp Verde Water System	1,461	\$48.88
Carefree Water Company	1,800	\$57.28
Carter's Water Company	13	\$20.00

System Name	Number of Users	Total \$ /Month 7,500 Gals
Casa Grande South Water Co.	70	\$29.83
Casa Grande West Water Co.	283	\$24.60
Cave Creek Water Company	2,513	\$74.38
C-D Oasis Water Company	11	\$32.40
Cedar Grove Water	368	\$41.13
Cerbat Water Company	279	\$31.88
Chandler (Summer)	73,600	\$19.31
Chandler (Winter)	73,600	\$19.31
Chaparral City Water Company	13,345	\$29.98
Chaparral Water Company	335	\$26.55
Chino Meadows II Water Company	889	\$39.03
Chino Valley	18,443	\$34.39
Chloride DWID	188	\$89.00
Cienega Water Company, Inc.	68	\$67.50
Circle City Water Company, L.L.C.	186	\$21.48
Citrus Park Water Co., Inc.	19	\$31.25
Clarkdale	1,780	\$49.50
Clay Springs DWID	151	\$43.70
Clear Springs Utility Co., Inc.	588	\$24.88
Clearwater Utilities Company, Inc.	832	\$32.78
Clifton 06-002 - Morenci Water and Electric	709	\$17.34
Cloud Nine Water Company Inc.,	52	\$14.88
Coldwater Canyon Water Company	399	\$18.60
Colorado City	902	\$30.25
Community Water Co. of Green Valley	9,997	\$22.94
Congress DWID	731	\$54.50
Cordes Lakes Water Co.	1,342	\$29.85
Cottonwood	8,968	\$35.85
CP Water Company	16	\$6.25
Cross Creek Ranch Water Company	13	\$56.00



ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
Dateland Public Service	110	\$34.75
Dateland Water	15	\$25.00
Dells Water Company	75	\$24.38
Desert Hills Water Co., Inc.	1,697	\$74.38
Desert Valencia Water System	11	\$11.75
Diablo Village Water Company	871	\$42.50
Diamond Valley Water Users	631	\$71.05
Diversified Water Utilities, Inc.	1,361	\$54.88
Doney Park Water (summer)	3,340	\$57.53
Doney Park Water (winter)	3,340	\$53.20
Double R Water Distributors, Inc.	NR	\$26.20
Douglas	5,491	\$17.59
Dragon Water Co., Inc.	137	\$66.05
DS Water Company	89	\$35.97
Duncan	331	\$32.19
Duncan - Hunter Estates	55	\$32.19
Eagar	1,931	\$20.74
Eagletail Water Company, LC	56	\$49.73
East Slope Water Company	822	\$17.55
Eden Water Company, Inc.	126	\$36.00
Ehrenberg Improvement Assoc.	295	\$24.35
El Mirage	11,369	\$36.30
El Prado Water Co, Inc.	137	\$32.68
Elfrida Domestic Water Users Assoc.	227	\$18.25
Eloy	2,651	\$25.71
Empirita Water Company, LLC	30	\$54.38
Escapees at North Ranch	410	\$21.00
F & F Water Company	NR	\$5.88
Far West Water & Sewer, Inc.	14,930	\$27.81
Farmers Water Company	1,955	\$16.38

System Name	Number of Users	Total \$ /Month /7,500 Gals
Fisher's Landing Water & Sewer Works	79	\$12.00
Flagstaff	18,792	\$30.51
Flagstaff Ranch Water Company, Inc.	218	\$46.18
Florence	3,955	\$26.88
Flowing Wells Irrigation	3,390	\$25.50
Fools Hollow Water Company	318	\$33.88
Forest Highlands Water Company	722	\$54.80
Forest Lake DWID	870	\$40.00
Fort Mohave Tribal Utilities Authority	862	\$21.00
Francesca Water Co., Inc.	131	\$24.35
Fredonia	719	\$23.13
Gadsden Water Co., Inc.	196	\$14.50
Gila Bend	651	\$24.30
Gilbert	69,341	\$22.73
Glendale	60,958	\$23.59
Globe	3,512	\$25.45
Golden Corridor Water Co.	52	\$34.75
Golden Shores Water Co., Inc.	1,495	\$25.88
Golden Valley DWID	1,528	\$36.13
Goodman Water Co.	628	\$78.69
Goodyear	12,604	\$21.12
Graham County Utilities Inc. - Water	1,203	\$35.93
Grand Canyon Caverns & Inn	9	\$21.25
Grandview Water Co., Inc.	20	\$5.00
Granite Dells Water Co.	12	\$14.05
Granite Mountain Water Co., Inc.	96	\$53.00
Granite Oaks Water Users Assoc.	452	\$31.00
Green Acres Water Company	52	\$84.88
Green Valley DWID	4,606	\$29.60
Greenehaven Water Co., Inc.	261	\$18.75



ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month 7,500 Gals
Groom Creek Water Users Assoc.	228	\$38.75
H2O, Inc.	6,668	\$26.57
Halcyon Acres Annex #2 Water Co.	35	\$29.05
Halcyon Acres Water Users Assoc.	77	\$10.00
Hatch Valley Water Company	70	\$30.63
Havasu Heights DWID	145	\$19.13
Hayden	275	\$9.63
Heber Domestic DWID	345	\$33.75
Heckethorn Water Company	44	\$43.40
High Country Pines Water Company	199	\$47.63
Highland Pines DWID	349	\$201.78
Hillcrest Water Company	197	\$37.50
Holbrook -Summer	1,847	\$18.13
Holbrook -Winter	1,847	\$19.63
Holiday Hills DWID	49	\$87.50
Holiday Water Company	157	\$29.10
Ho-Tye Water Company	3	\$40.88
Huachuca City	775	\$21.00
Humboldt Water Systems, Inc.	326	\$37.80
ICR Water Users Assoc.	375	\$38.20
Indiada Water Company, Inc.	56	\$34.25
J.N.J. Enterprises L.L.C.	258	\$50.38
Jackson Acres Water District	15	\$20.00
Jackson Spring Estates HOA	14	\$23.00
Jake's Corner Water System	19	\$24.03
Jerome	305	\$25.94
Johnson Utilities Company	16,414	\$44.00
Joshua Valley Utility Company	995	\$40.25
Katherine Resort Water Company	46	\$54.73
Kearny	841	\$29.70

System Name	Number of Users	Total \$ /Month 7,500 Gals
Keaton Development Company	496	\$38.50
Kingman	18,519	\$26.89
Kohl's Ranch Water Company	123	\$7.00
Kokopelli Springs Resort	40	\$21.80
La Casita Water Company, Inc.	441	\$47.25
Lago Del Oro Water Company	6,046	\$22.30
Lagoon Estates Water Company, Inc.	385	\$27.25
Lake Havasu City	28,864	\$18.70
Lake Verde Water Company	63	\$23.50
Lakewood Water Company	302	\$20.90
Las Quintas Serenas Water Company	1,019	\$29.20
Lazy C Water Service	133	\$43.59
Litchfield Park Service Company -Water	15,293	\$15.95
Little Park Water Company	68	\$28.00
Livco Water Company	373	\$28.25
Loma Estate Water Co.	31	\$64.00
Loma Linda Water Company	126	\$38.61
Lord Arizona Water Systems Inc.	337	\$38.12
Los Cerros Water Co., Inc.	816	\$30.80
Lucky Hills Water Company	4	\$36.38
Lyn-Lee Water	41	\$29.63
Mammoth	580	\$25.00
Marana	5,284	\$32.52
Marana DWID	837	\$40.28
Maricopa DWID	383	\$33.00
Mayer DWID	575	\$43.50
McAdams Water Company	6	\$34.25
McNeal Water Company (MWC, Inc.)	25	\$43.35
Mesa	134,567	\$28.73
Mesaland Water Company	97	\$16.20



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ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
Mescal Lakes Water Systems, Inc.	553	\$42.75
Metropolitan DWID (Tucson)	18,230	\$32.66
Michael's Ranch Water Users Assoc.	24	\$51.53
Mile Post 54 Community Water Well	15	\$20.00
Mirabell Water Company, Inc.	61	\$39.63
Mohawk Utility Company	137	\$29.00
Monte Vista Water Co., L.L.C.	40	\$11.50
Montezuma Rimrock Water Co., LLC	206	\$43.61
Morenci Water and Electric Company	1,275	\$18.73
Mormon Lake Water Co.	140	\$101.73
Morristown Water Company	50	\$32.50
Mountain Dell Water, Inc.	86	\$46.63
Mountain Glen Water Service (consol.)	385	\$44.85
Mt. Lemmon DWID	290	\$97.35
Mt. Tipton Water Co.	691	\$50.00
Naco Water Company, L.L.C.	373	\$76.47
Navajo Water Co., Inc.	318	\$42.44
New River Utilities Company	2,741	\$16.50
Nogales	5,344	\$18.38
North Mohave Valley Corporation	1,883	\$25.30
Northern Sunrise Water Company	353	\$47.87
Oak Creek Public Service Co.	311	\$27.15
Oak Creek Utility Corporation	34	\$56.70
Oak Creek Water Co., No. 1	694	\$21.34
Ojo Bonito Estates DWID	32	\$41.50
Orange Grove Water Company	314	\$21.00
Oro Valley	18,401	\$31.09
Page	2,932	\$20.78
Papago Butte DWID, IWDD	166	\$34.25
Paradise Trails Pioneer Valley	29	\$26.20

System Name	Number of Users	Total \$ /Month /7,500 Gals
Park Valley Water Company	510	\$33.88
Park Water Company, Inc.	129	\$39.30
Parker	1,173	\$23.13
Parker Lakeview Estates HOA, Inc.	40	\$55.10
Patagonia	400	\$19.58
Payson	7,703	\$36.35
Peoples Valley Water Company	218	\$50.08
Peoria	48,234	\$29.53
Phoenix - Spring & Fall Rates	402,926	\$15.74
Phoenix - Summer rates	402,926	\$7.71
Phoenix - Winter Rates	402,926	\$14.21
Picacho Peak Water Company	14	\$44.76
Picacho Water Company	147	\$37.50
Picacho Water Improvement	136	\$22.25
Pima Utility Company	10,150	\$11.68
Pine Valley Water Company	163	\$49.36
Pine Water Assoc. DWID	60	\$100.00
Pinecrest Water Company	37	\$64.50
Pinedale DWID	136	\$24.25
Pinetop Water Comm. Facilities Dist.	1,237	\$39.59
Pineview Water Co.	1,133	\$43.70
Poderosa Utility Company	539	\$45.75
Ponderosa Park DWID	291	\$87.04
Porter Mountain DWID	123	\$33.45
Prescott	22,043	\$34.53
Prescott Valley	17,997	\$29.78
Pueblo Del Sol Water Company	5,062	\$28.40
Q Mountain Mobile Home Park	219	\$27.00
Q Mountain Water	449	\$30.00
Quail Canyon DWID	NR	\$75.85



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ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
Quail Creek Water Company	1,585	\$36.00
Quail Ridge DWID	NR	\$51.25
Quartzsite	842	\$26.50
Queen Creek Water Company	8,770	\$20.45
Queen Valley DWID	575	\$47.34
RAINANCE WATER CO-OP	69	\$42.63
Rancheros Bonitos Water Co., L.L.C.	38	\$20.00
Rancho Del Conejo Water Co-Op	325	\$26.25
Rancho Sahuarita Water Co. L.L.C.	4,515	\$32.43
Ray Water Company	1,519	\$22.78
Red Rock Utilities, LLC.	NR	\$44.88
Ridgeview Utility Company	71	\$50.58
Rigby Water Company (combined)	337	\$22.50
Rillito Water Users Association	53	\$10.75
Rim Trail DWID	88	\$107.00
Rincon Ranch Estates Water Company	231	\$36.40
Rincon Water Company	70	\$57.50
Rio Rico Utilities Inc.	6,587	\$18.16
Rio Verde Utilities - Water	1,652	\$20.93
Roosevelt Lake Resort, Inc.	132	\$46.10
Rose Valley Water Company	2,399	\$15.98
Sabrosa Water Company	52	\$98.00
Safford	7,524	\$28.48
Saguaro Acres CFD	73	\$29.08
Saguaro Water Company	976	\$40.93
Sahuarita Water Company	5,102	\$32.43
San Luis	4,738	\$14.61
Sandario Water Company	359	\$25.03
Santa Cruz Water Company	16,457	\$41.90
Scottsdale	87,441	\$37.05

System Name	Number of Users	Total \$ /Month /7,500 Gals
Serviceberry Water Co. (Vernon Valley)	19	\$44.50
Seven Canyons Water Co.	53	\$83.75
Seven Ranches DWID	26	\$33.00
Shepard Water Company	124	\$21.60
Show Low	4,489	\$27.24
Sierrita Mountain Water Company	77	\$44.85
Signal Peak Water Company, Inc.	36	\$28.00
Silverbell Irrigation & Drainage District	110	\$36.13
Sitgreaves Water Company	70	\$33.00
Sky-Hi DWID	130	\$50.25
Sleepy Hollow Mobile Home Estates (s)	106	\$14.32
Sleepy Hollow Mobile Home Estates (w)	106	\$14.32
Snowflake	1,810	\$27.04
SoHi DWID	223	\$48.75
Solitude Trails DWID	47	\$97.50
Somerton	2,897	\$17.75
Sonoita Valley Water Company	97	\$59.55
South Rainbow Valley Water Coop.	5	\$22.50
Southern Sunrise Water Co	836	\$47.87
Southern Water Corporation	38	\$33.46
Southland Utilities Company, Inc.	625	\$9.98
Spanish Trail Water Co.	396	\$23.63
Springerville	766	\$19.13
St. David DWID	526	\$21.80
St. David Springs	3	\$5.88
St. Johns	1,196	\$20.25
Starlight Water Company, Inc.	671	\$65.20
Sterling Water Company	NR	\$33.25
Stoneman Lake Water Company, Inc.	74	\$15.00
Sulger Water Company, #2	15	\$18.20



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ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
Sun Leisure Estates Utilities Co., Inc.	57	\$21.50
Sun Valley Farms -Unit VI Water Co.	225	\$22.50
Sunizona Water Company	34	\$33.13
Sunland Water Company	73	\$9.63
Sunrise Vistas Utilities Company	666	\$34.95
Sunrise Water Company	1,345	\$32.75
Surprise	13,133	\$31.39
T.K. Water Service	47	\$30.85
Tacna Water Company	143	\$20.36
Tail Pine Estates Water & Imp. Assoc. Inc.	71	\$7.50
Taylor	1,254	\$13.15
Tempe	35,877	\$19.17
Thim Utility Co.	397	\$34.50
Thim Water Corporation	74	\$35.00
Thunderbird Farms WID	570	\$24.00
Thunderbird Meadows	128	\$50.16
Tierra Buena Water Company	126	\$26.50
Tierra Linda Homeowners Assoc.	47	\$44.33
Tierra Mesa Estates Water Company, Inc.	230	\$23.00
Timberland Acres DWID	324	\$39.25
Tolleson	1,563	\$27.48
Tombstone	869	\$38.46
Tonto Creek Utility Co.	71	\$36.13
Tonto Hills Utility Co.	130	\$102.90
Tonto Village Water Company	198	\$12.83
Tortolita Water Co., Inc.	2	\$55.90
Truxton Canyon Water Company, Inc.	1,056	\$31.50
Tubac Water Company, Inc.	NR	\$13.50
Tucson	223,614	\$19.57
Turner Ranches Water & Sanitation	112	\$49.02

System Name	Number of Users	Total \$ /Month /7,500 Gals
Utility Source, LLC	332	\$62.76
Vail Water Company	3,425	\$45.58
Vail Water Company	3,425	\$51.00
Valencia Water Co., Greater Buckeye Div.	652	\$36.63
Valencia Water Company, Inc.	5,302	\$34.45
Valle Verde Water Company	800	\$21.50
Valley Pioneers Water Co., Inc.	2,314	\$38.25
Valley Utilities Water Co., Inc.	1,403	\$31.77
Valley View Water Company, Inc.	NR	\$47.38
Verde Lakes Water Corporation	787	\$20.45
Verde Lee Water Company	182	\$35.25
Verde Santa Fe Water Company, L.L.C.	NR	\$15.00
Vernon DWID	30	\$40.25
Vernon Valley Water Company	19	\$44.50
Villa Grande DWID	99	\$51.23
Virgin Mountain Utilities Corporation	1	\$42.50
Viva Development Corporation	NR	\$10.13
Voyager Water Company	1,027	\$26.00
Walden Meadow Comm. Co-op	297	\$42.00
Walnut Creek Water Company, Inc.	254	\$26.00
Watco, Inc. (prev. Silver Well Svcs)	302	\$49.00
Water Utility of Greater Buckeye, Inc.	616	\$36.63
Water Utility of Greater Tonopah, Inc.	359	\$48.25
Water Utility of Northern Scottsdale	75	\$98.00
Wellton	908	\$22.70
Wenden DWID	228	\$37.99
West End Water Company	233	\$42.60
West Village Water Company	55	\$63.88
Whetstone DWID	372	\$42.88
White Hills Water Co., Inc.	94	\$87.25



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ARIZONA WATER AND WASTEWATER RESIDENTIAL RATES - 2009

System Name	Number of Users	Total \$ /Month /7,500 Gals
White Mountain Summer Homes WID	468	\$56.70
White Mountain Water Company	195	\$45.20
Why Utility Company, Inc.	90	\$47.00
Wickenburg	2,418	\$13.50
Wilhoit Water Company, Inc.	64	\$41.25
Willcox	1,907	\$26.42
Williams	2,712	\$45.70
Willow Lakes Property Owners Assoc.	79	\$41.88
Willow Valley Water Company	1,581	\$24.50
Winchester Water Company, L.L.C.	137	\$20.03
Winslow	3,022	\$20.39
Winslow West Water Company, Inc.	10	\$8.25
Woodruff DWID	62	\$26.88
Woodruff Water Co., Inc. W-04264A	4	\$39.24
Worden Water Company	24	\$24.75
Yarnell Water Improvement Assn.	619	\$53.08
Yavapai Country Club Water Company	36	\$63.58
Yavapai Estates	95	\$32.53
Yucca Water Association, Inc.	105	\$17.50
Yuma	28,500	\$29.86



Folder - A Rate Comparison to Surrounding Areas, Rate Comparison Calculations.xlsx

Rate Comparison Analysis

Goodman Water

Goodman Rate per WIFA study (7,500 gallons) 78.69 (a.) Note, rate agrees with study so calculations are correct.

From Bourassa analysis of Rate Case file (Excerpt Below) (Shed H-4, P1 [page 104 in PDF file]) Billing Rates Per Month

Usage	Present Bill	Proposed Bill
7000	\$ 75.73	\$ 116.90
8000	\$ 81.64	\$ 127.82
7500	\$ 78.69	<u>78.69</u>

Calculation is rate at 7,000 Gals + 1/2 difference between 8,000 Gals and 7,000 Gals.

TRIES TO STUDY

New rate makes Goodman Water the most expensive in all of Arizona!!!

Goodman Water Company
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 5/8x3/4 Inch Meter
 Test Year Ended December 31, 2009
 (Excludes all Revenue Related Taxes)

Exhibit Schedule H-4
 Page 1
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
1,000	\$ 42.20	\$ 56.97	\$ 14.77	35.00%
2,000	46.15	63.77	17.62	38.17%
3,000	50.10	70.56	20.46	40.84%
4,000	54.05	77.36	23.31	43.12%
5,000	58.00	84.15	26.15	45.09%
6,000	63.91	95.07	31.16	48.75%
7,000	69.82	105.98	36.16	51.80%
8,000	75.73	116.90	41.17	54.36%
	81.64	127.82	46.18	56.56%

Present Rates:
 Monthly Minimum: \$ 42.20
 Gallons in Minimum Charge Per 1,000 Gallons
 Up to 4,000 \$ 3.95
 Over 9,000 \$ 5.91
 Over 9,000 \$ 7.11

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FOLDER B - BURST OF
HOUSING BUBBLE

- THE BUBBLE STARTS TO BURST

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The Housing Bubble Starts to Burst

The Housing Bubble Starts to Burst

By Dean Baker

truthout | Columnist

Tuesday 06 March 2007

Is there anything as beautiful as the sound of surprised economists in the springtime? I haven't had this much fun since the NASDAQ started to deflate seven years ago.

Okay, enough of the gloating; while the collapse of the housing bubble was both predictable and inevitable, it is not pretty. Tens of millions of people will be hurt as they see much of the equity in their homes - money that most had counted on to support their retirement - disappear. Millions more will be forced out of their homes as they find that they are unable to meet the payments on adjustable rate mortgages that reset at higher rates. People who had worked hard and saved in order to become homeowners will see their dream disappear.

The timing and process of the unwinding of the bubble cannot be known, but the basic story is clear. Investors are finally realizing that the high-risk mortgages they have been holding are high-risk.

Mortgage brokers, who make their money on issuing mortgages, not holding them, had been anxious to get as many people as possible to buy mortgages. While old-fashioned bankers would demand large down payments and good credit histories, many mortgage brokers were happy to issue mortgages that they knew buyers could not pay off. Since the brokers dump their mortgages in the secondary market almost immediately after

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with low "teaser rates" that were often several percentage points below the market rate to which the loan would eventually reset. Many homebuyers who could meet their monthly payment on a mortgage with a 1.5 percent interest rate would be hopelessly over their heads when the mortgage reset to a 6.5 percent rate.

But, everything was fine, as long as home prices continued their rapid appreciation. If a homebuyer's income wasn't high enough to make the mortgage payment, the homebuyer could draw on the new equity created by a rising home price. As a result, delinquency and foreclosure rates remained low through 2004 and 2005, even as the number of high-risk mortgages soared.

However, the party began to end last year as house prices started to fall. The fall thus far has been relatively modest (around 3 percent nationwide), but with prices going in the wrong direction, most new homebuyers have no equity that they could rely upon to meet their monthly payments. As a result, delinquency rates began to soar in 2006. More than 10 percent of the subprime adjustable rate mortgages issued last year (the most risky category) were already seriously delinquent or foreclosed within 10 months of issuance. This is even before any of these mortgages reset to a higher interest rate.

With foreclosure rates soaring, the music is about to stop. The investors who bought up these mortgages in the secondary market are now refusing to lend more money. Credit is drying up for both the subprime and the Alt-A market, which is a notch above subprime in creditworthiness. These two segments of the housing market together accounted for 40 percent of the mortgages issued in the last two years.

If 40 percent of potential homebuyers suddenly have problems getting credit, it has to have a large impact on the housing market. Throw into the mix that the inventory of unsold homes is 25 percent higher than at the same time last year. And, the number of vacant units up for sale (normally an indication of a highly motivated seller) is up more than 40 percent compared to last year. Since house prices fell by three percent last year (six percent in real terms), it looks like we have the beginnings of a serious slide in house prices. And, a sharp fall in house prices will lead to more problems in the mortgage market.

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many moderate income families to buy overvalued homes that they could not afford. And the mortgage brokers made a fortune selling bad mortgages.

That is the way the US economy works these days. Those who mess up the economy do well, while their victims - in this case millions of moderate-income homebuyers who will lose their homes - pay the price for the experts' mistakes.

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THE WALL STREET JOURNAL.

WSJ.com

JULY 1, 2009, 7:35 P.M. ET

A Government Failure, Not a Market Failure

The housing bubble was a fully rational response to a set of distortions in the free market—distortions created primarily by the public sector.

FOLDER - B

WALL STREET JOURNAL -
HOUSING BUBBLE

As a people we need, at all times, the encouragement of home ownership.

--HERBERT HOOVER, 1932

The idea that home ownership confers special benefits on American society is deeply embedded in our culture—so much so that our national tax policy confers a special benefit of its own on it. Home ownership is granted an advantage over all other forms of ownership in the form of an enormous deduction on the interest payments most individuals incur in financing their homes. Nothing else in the tax code comes anywhere near that deduction in scope or size. We have decided, as a nation, that home ownership is not only a good thing for an individual or a family, but that it is beneficial for the public at large and the country as a whole. Otherwise, why would it be necessary for the government to give it this kind of preferential treatment? Without it, clearly, we believe that the national rate of home ownership would be lower, and that a lower rate of home ownership would be deleterious to our common weal.

After 2000, the national push toward home ownership intensified in three dimensions, leading to a doubling of housing prices in just five years' time. First, the Federal Reserve Board's interest-rate policy drove down the cost of borrowing money to unprecedented lows. Second, a common conviction arose that home ownership should be available even to those who, under prevailing

conditions, could not afford it. Finally, private agencies charged with determining the risk and value of securities were exceptionally generous in their assessment of the financial products known as "derivatives" whose collateral resided in the value of thousands of mortgages bundled together. The rating agencies understated the risks from these bundled mortgages by assuming that home prices were simply going to rise forever.

Commentary

When the housing bubble burst in 2006, the damage to the financial system pushed the global economy into the worst contraction since the Great Depression. In the midst of the pain and suffering that have accompanied financial collapse and economic contraction—over \$15 trillion in wealth has been lost by American households alone while, to date, more than 6 million job losses have boosted the unemployment rate to 9.4 percent—much of the blame has been placed on unregulated financial markets whose behavior is said to have revealed a terrible flaw in the foundation of capitalism itself.

This was a market failure, we are told, and the promise of capitalism has always been that the self-correcting mechanisms built into the system

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would preclude the possibility of a systemic market failure.

But the housing bubble only burst after government subsidies pushed house prices up so fast that marginal buyers could no longer afford to chase prices even higher. A bubble created by rigged financial markets and a government-sponsored obsession with home ownership is not a result of market failure, but rather, a result of bad public policy. The belief that home ownership, per se, is such a benefit that no amount of government support could be too great and no pace at which home prices rise could be too fast is the root of the crisis.

There was no market failure.

According to The New Palgrave Dictionary of Economics, an invaluable collection of precise summaries of virtually every topic in the dismal science: "The best way to understand market failure is first to understand market success, the ability of a collection of idealized competitive markets to achieve an equilibrium allocation of resources which is Pareto optimal." Allow me to translate. "Pareto optimality," a term named after the Italian economist Vilfredo Pareto (1848–1923), is defined as an allocation of economic resources that produces the greatest good. Thus, if one changes the allocation of resources away from "Pareto optimality" for the purpose of making someone better off, that change will make someone else worse off. Economists have expended a great deal of effort to demonstrate that free and competitive markets produce an outcome that is "Pareto optimal."

This is not to say that there is no such thing as market failure. There are many instances of market failure. Someone may possess information that others do not, as in insider trading, and thereby gain an illegitimate leg up. There may be too few players in a given market, which allows them to manipulate, hoard, and toy with prices. Capricious government intervention in cases where it is neither required nor appropriate constitutes another condition that may create a market failure.

There are also cases of market failure in which some people get a free ride while others bear a

disproportionate burden. This is the case in national defense, for example, in which soldiers bear a burden non-soldiers do not. Consequently, a government subsidy for national defense is necessary for the maintenance of security and power, and the overwhelming majority of citizens acknowledges it and does not complain about it. National defense is a public good, perhaps the original public good.

Owner-occupied housing is something else that has been deemed a public good. Herbert Hoover's affirmation of the need for encouragement of home ownership "at all times" came in 1932 at the fiercest stage of the Great Depression. Others have made powerful arguments that homeowners make better citizens and contribute to stable communities. Why renters do not and cannot offer the same contribution to the public good is never specified, but existing homeowners, homebuilders, mortgage lenders, and mortgage servicers have all seized on the idea that subsidizing home ownership is "Pareto optimal."

It isn't.

Subsidies for home ownership—in the form of full deductibility of mortgage interest, lower mortgage borrowing rates derived from government guarantees for mortgage lenders like Fannie Mae and Freddie Mac, and deductibility of local real-estate taxes—have long benefited those who own homes at the expense of those who do not. The size and severity of the burst bubble makes a mockery of the argument that the disproportionate gains to homeowners also improved the welfare of renters. By erasing, in just a few years, nearly one-third of the wealth on the national balance sheet, the collapse has created a substantial loss in national welfare, including for renters.

Home ownership should not be considered a public good deserving of government subsidies even without the bubble collapse for a simple reason: Those who receive the subsidy get to capture the benefits in the form of home prices that are higher than they would otherwise be without government support. The subsidies make homeowners better off while they make renters worse off. They are, therefore, not Pareto

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optimal.

In addition, home-ownership subsidies are inherently unjust. They favor the relatively well-off at the expense of those who are poorer. Why? Because the value of an owned home and the size of the government subsidy both grow as income increases. A tax deduction tied to home ownership for a well-to-do American with a \$1 million mortgage and a \$60,000 annual interest payment is worth \$22,000 (assuming the American is in the 35 percent tax bracket). The higher the marginal tax rate rises, the more valuable the mortgage-interest deduction is to the homeowner. For a family with a modest income that may pay little or no income tax, the mortgage-interest deduction is worth virtually nothing. And yet, for the past 15 years, even the party in the United States most associated with preferential treatment for the poor began preaching the evangel of home ownership as a form of class salvation.

During Bill Clinton's first term, government housing policy changed substantially. After decades in which liberal politicians and thinkers devoted themselves to arguments for expanding the number of public-housing units, the disastrous condition of those units led the President, a "new Democrat," to a dramatic ideological shift in emphasis. No longer would public housing be at the top of the liberal Democratic agenda. Instead, borrowing from conservative ideas about the inestimable benefit of home ownership to the striving poor, the Clinton administration and members of his party in the House and Senate decided to use government power to achieve that aim.

In 1994, the "National Homeownership Strategy" of the Clinton administration advanced "financing strategies fueled by creativity to help homeowners who lacked the cash to buy a home or the income to make the down payments" to buy a home nonetheless. It became U.S. government policy to intervene in the marketplace by lowering the standards necessary to qualify for mortgages so that Americans with lower incomes could participate in the leveraged purchases of homes.

The goal of expanding home ownership led to the creation of new mortgage subsidies across the

board. The loosening of standards became the policy of Fannie Mae and Freddie Mac, the pseudo-private "government-sponsored enterprises" that bought mortgages from originating lenders. A particular change in the tax law in 1997 encouraged many households to make buying and improving a home the primary vehicle by which they enhanced net worth. By eliminating any capital-gains tax on the first \$500,000 of profits from the sale of an owner-occupied residence once every two years, Washington encouraged enterprising American families to purchase homes, fix them up, re-sell them, and then repeat the process. Flipping became a financial pastime for millions because this special advantage created a new incentive—which didn't exactly fit the model of encouraging people to remain in a stable home for many years and thereby help to stabilize the neighborhood around them.

There was, however, a rival to home ownership as a way of building wealth in the late 1990s—the run-up in the stock market, which was caused by another bubble, this one in the technology sector. Given the size of the gains in the stock market, which were running 20 percent or more a year, the relative desirability of home ownership eroded. But when, in 2000, the tech bubble burst, households were left in search of an alternative way to store and enhance wealth. Home ownership emerged as the most promising alternative. After 2000, and especially after 2002, U.S. real house prices began to surge.

Everything I have described thus far constituted a necessary but not sufficient precondition for a full-fledged housing bubble. It took the addition of a new market in derivatives to drive bankers, lenders, and credit agencies to create the conditions for an implosion by expanding mortgage financing to borrowers who could not possibly afford the homes they were purchasing.

In February 2003, Angelo Mozilo, then head of the major mortgage supplier called Countrywide, declared that the need to provide a down payment should no longer be an impediment to home ownership for any American.

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0075006d0065006e0074007300200061006e0064-002000530065007400740069006e00670073002f-004b0067006a00650072006d0061006e0069002f-004400650073006b0074006f0070002f004d0061-006b0069006e002e00680074006d006c00000006-00000066006f006f00740031000000 Was it any wonder that a home-buying frenzy occurred when Countrywide's chief was suggesting that there was no need for a purchaser to supply even a minimal equity stake in his purchase? During 2004 and 2005, the rise in home prices accelerated. That, in turn, caused Americans to refinance their homes to remove their equity—their accumulated wealth, in other words—and convert it into disposable income. They did so because they were confident the equity would simply be recreated by continued growth in the value of their homes.

The hunger for more mortgages that could serve as backing for more new securities led to the acceleration of undocumented, no-down-payment, negative-amortization mortgage loans to individuals with virtually no prospect of servicing them. The designers of derivative securities effectively collaborated with the rating agencies, such as Standard & Poor's and Moody's, that were relied upon (often through government mandate) by pension funds and other gigantic repositories of wealth with identifying the securities safe enough to invest in.

A situation in which creators of derivatives provide the monetary compensation for the very agencies that are tasked with determining the riskiness of their securities hardly constitutes a competitive market. Indeed, it constitutes dangerous collusive behavior. But that collusion, again, was made possible by the distorting actions of government agencies, which effectively provided a subsidy for risk-taking that was, by definition, unsustainable.

It is fair to ask, in the light of past bubbles that have burst—like the entire economy of Japan in the 1990s and the tech-stock tragicomedy—why investors were prepared to take on the substantial risks tied to unfamiliar derivative securities whose value was tied to the continued rise in house prices. A substantial part of the answer lies with the Federal Reserve Board. It deliberately adopted a policy that it would not seek to identify bubbles

and then to act in ways that would let the air out slowly. Instead, Fed Chairman Alan Greenspan allowed bubbles to inflate and then stepped in to repair any damage afterward. This constituted a substantial subsidy to excessive risk-taking.

The policy became clear in 1998, the year in which the unwinding of the Asian currency crisis together with Russia's defaulting on its debt created huge volatility in the credit markets. At the time, Long Term Capital Management, a hedge fund, was on the verge of collapse, and an aggressive intervention was staged to save it. The New York Fed provided its offices and encouragement to bring financial firms together to contain it.

The salvation of Long Term Capital Management suggested a new reality for the marketplace: Aggressive risk-taking in pursuit of huge profits was manageable even if bubbles were created, just so long as the Fed was around to raise the "systemic risk flag" in the event of serious trouble. There would always be a rescue; the trick was to get out before everything began to collapse. It was this fact that led Charles Prince, then the head of Citicorp, to give the game away in July 2007 about the reckless and imprudent nature of his bank's conduct. "When the music is playing," Prince said, "you've got to get up and dance."

The housing bubble was thus a fully rational response to a set of distortions in the free market—distortions created primarily by the public sector. The heads of large financial institutions, as Prince's remark suggested, recognized the risk-taking subsidy inherent in public policy, but felt they had no choice but to play along or fall behind the other institutions that were also responding rationally to the incentives created by government intervention.

The housing collapse and its painful aftermath, including that \$15 trillion wealth loss for U.S. households (so far), do not, therefore, represent a market failure. Rather, they represent the dangerous confluence of three policy errors: government policy aimed at providing access to home ownership for American households irrespective of their ability to afford it; the Fed's claim that it could not identify bubbles as they

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were inflating but could fix the problem afterward; and a policy of granting monopoly power to rating agencies like Standard & Poor's, Moody's, and Fitch's to determine the eligibility of derivative securities for what are supposed to be low-risk portfolios, such as pension funds.

The Fed's bubble policy has evolved in a constructive direction since the bursting of the U. S. housing bubble. The trauma of dealing with the aftermath, including the fire sale of the investment bank Bear Stearns and the outright failure of Lehman Brothers, has convinced the Fed that more effort should be directed toward identifying bubbles before they grow too large.

Now the collusive relationship between rating agencies and creators of derivative securities needs to be ended by bringing more market discipline to the process. Free entry into the rating business should be permitted. The monopoly of a small number of rating agencies to determine the eligibility of new securities for investment by massive pension funds is unjustifiable. The practice whereby the creators of such derivative securities compensate the rating agencies for the ratings also needs to be ended.

Alas, the federal government's response to the collapse of the housing bubble has been deeply problematic. It has chosen to provide additional subsidies to homeowners while nationalizing the government-sponsored enterprises, Fannie Mae and Freddie Mac, that helped to subsidize lower mortgage-interest rates. While the extreme distress visited on American households by the collapse of the housing bubble certainly needs some alleviation, over the longer run we must have a serious national debate on the question of the degree to which we still want to consider home ownership a public good.

The long-term solution is for government to stop playing favorites, as it has for decades with housing. Home ownership should neither be penalized nor favored under government policy. We have seen how that distortion led inexorably to a degree of wealth destruction we have not seen in our lifetimes. The distortion of the market introduced by government intervention can and must be brought to an end. The market that would

take its place after this dramatic and admittedly difficult change would allow Americans to allocate their resources more effectively. It would no longer create an unjust advantage for the wealthy homebuyer. And it would, finally, make it possible for Americans to see their homes as they should be seen—not as investment vehicles, but rather, as the places they live in, the hearthstones of their families.

John H. Makin is a visiting fellow at the American Enterprise Institute and a principal at Caxton Associates.

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FOLDER-0 EQUIVALENT
HOUSING UNITS
GWC RESPONSE TO INTERVENOR
DR-3

GOODMAN WATER COMPANY, INC.'s RESPONSES TO
INTERVENOR'S THIRD SET OF DATA REQUESTS
DOCKET NO. W-02500A-10-0382
MARCH 7, 2011

3.01 Please provide a narrative and details on Goodman Water Company's total water works capacity in terms of Equivalent Development/Dwelling Units (EDU's) in the Eagle Crest Ranch development.

RESPONSE: Attached as Appendix "A" is a copy of a "worksheet" previously prepared by WestLand Resources, Inc. which outlines the "Planning and Design Criteria EDU's," which were used in connection with the design of the water system for the Eagle Crest Ranch subdivision.

3.02 Please provide the dates for the earliest date of water service provided to lot numbers 478 to 590 and separately for lot numbers 591 to 617.

RESPONSE: The Company's records indicate that the earliest date for the physical delivery of water service to lots located within (i) lot numbers 478 to 590 and (ii) lot numbers 591 to 617 was February 22, 2007 in each instance.

3.03 Please provide a narrative of the extent of damage to the Goodman Water System that resulted from the recent cold weather. Indicate what water plants were affected, equipment that failed, estimated water lost to leakages, dates and time the failures occurred, time frame for when failure occurred and repairs were completed and associated costs for repairs.

RESPONSE: This information will be provided, when fully compiled, as a supplement to the Company's Responses to this Third Set of Data Requests.

3.04 Please provide a narrative for addressing the attached Water Plant #4 Upgrade for boosting Water Pressure to meet a Fire Flow Capacity of 1,600 GPM for the K Zone that was approved for Construction by the ADEQ on 5/26/04. Include (a) what entity requested the upgrade, (b) what was the total cost of the upgrade, (c) confirm the upgrade was constructed and installed in Water Plant #4, (d) Date the installation was completed and put in service.

RESPONSE: Attached as Appendix "B" are copies of (i) a September 2003 communication from Golder Ranch Fire District to D.R. Horton Homes and (ii) a June 28, 2004 communication from Golder Ranch Fire District to D.R. Horton Homes. These documents indicate that the subject upgrade at Water Plant #4 was occasioned by a 1,500 GPM fire flow capacity requirement enforced by the Golder Ranch Fire District against

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Planning Demand Criteria

Platted EDU's = 959

Residential person per housing unit (pphu) = 2.8

Demand per person = 125 gallons per capita per day (gpcd)

Planned Commercial = 83 Acres

Demand per Acre = 1,400 gallons per acre per day (gpad)

Commercial EDU's = 83 Acres x 1,400 gpad = 116,200 gallons / 125 gpcd / 2.8 pphu = 332 EDU's

Total EDU's at Buildout = 959 + 332 = 1,291

Storage Capacity Criteria (from master plan), ADD + fire flow plus 15%

Fire Flow = 2,000 gpm for 2 hours = 240,000 gallons

Well Capacity Criteria PDD

Booster Capacity = PDD + FF

Water Plant No. 1

Total Storage = 400,000 gallons

Fire Flow = 1,000 gpm for 2 hours (residential only) = 120,000 gallons

Available Storage = 280,000 gallons, 800 edus

Well No. 1 = 500 gpm, 1029 edu's

J- Zone Booster Station = 2,000 gpm

Well No. 2

800 gpm, 1646 edu's

PULPICK - P, PUBLIC UTILITIES RATE
FEES AND THE LEGAL ENVIRONMENT
COST OF SERVICE

copy page

Another important rate design issue is referred to as unfair takings. Claims of unfair takings have repeatedly been made in the context of impact fees.² This issue is addressed in the following US Supreme Court rulings: *Nollan v. California Coastal Commission* of 1978, which is often described as the seminal essential nexus case; and in *Dolan v. City of Tigard*, OR, 1994, which contains a ruling on the rough proportionality test. The third of these cases is the 2001 Colorado Supreme Court ruling in *Krupp v. Breckenridge Sanitation District*. These three cases on unfair takings and impact fees will be further discussed in later chapters. The 2001 Colorado court ruling lays a useful foundation for fair and equitable impact or tap fees. It established a strong cost-of-service (COS) relationship between financial planning objectives, such as growth pay for growth and the buy-in method, consisting of reimbursement and new capacity cost charges, for establishing defensible impact fees.

Additional significant cases that established legal precedent include a 1994 case on conservation rates, *Brydon v. East Bay Municipal Utility District* (EBMUD). This case also introduced the notion of the nexus between impact fees and a perpetual right of the property to be served a corresponding supply of water. Other cases concerned economic incentive rates. The *Brydon* case dealt primarily with the issue of conservation rate design. It upheld the validity of rates established by EBMUD in California to implement increasing rate blocks. This rate design results in proportionately larger revenues per unit sold from large users and serves as a price signal to these customers to conserve water. More recently, new state statutes in California have clarified that conservation rates, including water budget rates, need to be based on a cost nexus for each tier. Chapter 9 presents a detailed discussion of these new statutes and their expected impact on rate making, including intergenerational implications of impact fees.

Economic incentive rulings are not particularly clear-cut. In *Hicks v. the City of Monroe, LA* (1959), the ruling established that when acting in a proprietary role, no discriminatory rates must be observed. This means that when a utility acts as entrepreneur and has a profit motive in mind, it must adhere to nondiscriminatory rates among its customers served in this capacity. Definitions of nondiscriminatory rates will be provided in other sections of this handbook. Later cases, however, allowed rate

² Also known as system development charges, connection fees, plant investment fees, participation fees, reimbursement fees, buy-in fees, backlog fees, system service fees, service commitment fee, etc. Collectively, these fees denote a one-time charge that new users as a prerequisite for receiving services. Chapter 8 contains a specific discussion of such fees based on an authoritative Colorado Supreme Court ruling (*Krupp v. Breckenridge Sanitation District*, 2001).

restructuring as an incentive to keep a large customer. An example of this is *Liberty Rice Mill Inc. v. the City of Kaplan, LA* (1996).

Cases dealing with taxation without representation may be found in *Burke v. City of Vancouver, WA* (1988), subsequently upheld by the Washington State Supreme Court, and *West Capital Associates v. City of Annapolis, MD* (1996). These cases discussed the issue of whether rates should be considered taxes. In *Burke*, outside-city users filed a complaint stating that, because they had no representation in the decision making regarding rates for outside users, these rates should be declared invalid and considered to be taxes levied on those particular users. The court ruled to the contrary and determined the validity of the rates that were charged, because they were based on a COS rate approach. Therefore, these rates could not be considered taxes. Numerous other cases dealing with the subject of taxation without representation have been reported. In general, these cases uphold the legal principles of reasonableness and nonarbitrariness in rate making and reject the notion of nonjustified rate discrimination.

Legal Principles in Rate Design

In this section, legal norms, such as lawful measures, reasonableness and discrimination, and burden of proof are reviewed. Also, possible factors to use in creating defensible rates are discussed.

Lawful Measures

In developing rates, it is generally accepted that rates established in a lawful manner and satisfying legal and technical principles of reasonableness and without unjust discrimination (see Cardinal Legal Rules and Cardinal Technical Rules in chapter 3), by a municipality are reasonable. A lawful manner would typically include the following steps:

1. A rate ordinance with details appropriate to the jurisdiction would be prepared.
2. The proposed rates would be discussed in one or more public hearings.
3. Subsequent to the public hearing, a vote by the governing body to adopt the rates would have to be moved and approved by a majority of a legal quorum.
4. The adopted rates must be recorded in an appropriate manner.
5. The rates adopted should then be implemented in the utility's billing system.

been employed in alternative investments. Thus, the rate of return on the owner's investment, or owner's equity, should be sufficient to attract other investors into the company. However, the ruling also focused attention on the promotion of the financial soundness of the utility. This major corollary to the return issue requires that the utility be managed efficiently and economically. In other words, without efficient and economical management, the utility would not automatically earn a reasonable return because it would likely exceed its permitted level of expenditures, or it would not be able to keep its service at a required quality level.

The post-*Bluefield* period is characterized by several cases, the first of which is the 1944 *Hope* case. In this particular case, *Federal Power Commission v. Hope Natural Gas Company*, 320 US 591 (1944), the issue of appropriate capital costs was delineated by the US Supreme Court. In its discussion of this decision, the Court established that legitimate capital costs should consider a combination of depreciation cost, debt service, stock dividends, and rate of return on owner's equity. However, no particular formula or caveats were offered to prescribe the proper combination of these variables. The earning experiences of other water utilities, segments of the utility industry, and unregulated utilities may also be used to establish a reasonable rate of return. In essence, this ruling established that the utility's allowable earnings should be a function of various factors that, altogether, would enable the utility to earn a reasonable return on its investor-provided capital.

Many other cases followed the *Hope* case. These cases were mainly oriented toward the definition of revenue requirements. The *Bluefield* and *Hope* cases are considered the seminal cases in determining the appropriate capital requirements for a regulated utility and for nonregulated utilities acting in a proprietary manner when serving outside-city or contract customers. Together with the *Smyth* case, as shown in Figure 1-2, these three cases may be thought of as the trunk of a tree while rate design issues may be thought of as the secondary branches that, together, shape the canopy of the tree.

Rate Design

Rate design concerns the manner in which individual customers, or groups of customers, are billed. Rate designs are developed to promote equity among customers by charging each customer in such a way that a customer is neither subsidized by nor subsidizes other customers. Several significant rate design issues were addressed and decided in cases such as *Durant v. City of Beverly Hills* (1940), *Village of Niles v. City of Chicago* (1980), and the *City of Pompano Beach v. Oltman* (1980).

EQUAL PROTECTION

In addition to the well-known cases illustrated in Figure 1-2 of chapter 1, the Equal Protection Clause of the 14th Amendment of the United States Constitution also applies to the pricing of utility services. Equal Protection under the Law requires governments and businesses to treat persons the same way without preferential (advantageous or disadvantageous) treatment. In the context of utility rates and charges, it has mainly been used

to complain about ~~unfair takings~~ regarding property condemnations, but it has also been used for rate complaints where rates presumably exceed the cost of providing service. For example, complaints could state that it is not acceptable to charge one residential user more per unit of service than another residential user unless there is an actual utility service reason for doing so. Courts often find that the plaintiffs have not met the burden of proof to demonstrate a lack of rationality in the utility's rate development or alleged overcharges. Court rulings might state that utilities have wide latitude in selecting rate methodologies and rate practices. The same rulings may also caution that differentiation among customers not based on actual differences, such as the cost of service (sometimes expressed in terms such as "utility factors" or "cost-based rates"), might be cause for finding those rates impermissible and subject to redress by the court.³ Thus, pricing practices based on criteria other than utility service factors, other than the utility's customer-service factors or characteristics, may be the basis for legal redress.

Customer service factors may be established in cost-of-service studies. Indeed, cost-of-service studies are conducted in order to determine such differences by allocating user charge revenue requirements to different customer classes based on their respective proportionate class service characteristics. Thus, if the unit cost of serving a relatively larger residential user is higher than the unit cost of serving a relatively smaller residential customer, a higher rate might be defensible. However, if the application of criteria other than those related to the "proportional cost basis," such as race, sex, social desirability, political motivations, customer or customer class income,⁴ or noncost (or unquantifiable costs) based environmental considerations, are the basis for rate making, the resulting rates might not be in compliance with the equal protection provision and

³ For examples, see *Bennett Bear Creek Farm Water and Sanitation Dist. v. City and County of Denver Bd. of Water Comm'rs*, 928 P2d. 1254 (Colo. 1996); *General Textile Printing and Processing Corp. v. City of Rocky Mount*, 908 F. Supp. 1295 (E.D.N.C. 1995) (Equal protection claim).

⁴ Admittedly, there are other federal laws that appear inconsistent regarding the low-income criterion. For example, the Clean Water Act of 1972 (PL92-500) has a user charge provision that would allow a wastewater utility to subsidize wastewater rates for low-income customers by proportionally adding such subsidy costs to the revenue requirements of all other customer classes.

FOLDER-E, REASONABLE RETURN

TO RATES, FEES & LEGAL ENVIRONMENT

case started in the 1870s. Interestingly, the development of railroads across the United States in the mid-1800s and the industrial might of Standard Oil Company thereafter prompted the development of antitrust measures. The railroads received significant public land grants to finance their new westbound lines. In addition to the revenues from land sales, they developed intricate price discrimination schemes to exploit their respective monopoly positions. Public outcries resulted in various state-based remedies. When state laws proved ineffective to stop these price exploitations, the federal government intervened to establish a regulatory commission that eventually became the Interstate Commerce Commission (ICC).

Under ICC tutelage, the concepts of fair and just rates received more rigorous intellectual attention. This body of knowledge developed by ICC became available for practical applications to other utilities besides the railroads. The Sherman Antitrust Act of 1890 legitimized the fight against monopolistic price behavior and paved the way for more sophisticated regulation in later years. Thus, when setting rates, publicly or privately provided water utility services became subject to certain legal principles stemming from these early cases and the Sherman Act. Furthermore, privately owned water utilities were subject to price regulation because such utilities are natural monopolies. A definition of a *natural monopoly* is an entity that requires very large investments to start production and is characterized by decreasing average costs when service expands. It is the sole provider of the goods or services within its service territory. The investment cost of a second provider would be prohibitively expensive and, therefore, a second provider of goods or services would not be economically viable. Being the sole provider, the natural monopoly's prices should be regulated to avoid monopolistic profits. The public interest is thereby served by such regulation. The most common issues addressed by water rate lawsuits have been over the concepts of rate base, rate of return, and rate design. Key cases on these issues are summarized in the following sections. For more in-depth coverage, please refer to the references at the end of this chapter.

Rate Base

Lawsuits originating in the 1870s and continuing into the early 1900s often dealt with rate-base issues. Rate-base issues typically concern the determination of the investment on which the private owner of the utility is entitled to obtain a return. Original cost of investments was the norm used for determining the rate base during this period. The rate base would be multiplied by a rate of return to establish the quantitative dollar return on the rate base. The rate of return is the percentage to be applied to the

rate base to generate the authorized return to the owner. The emergence of the fair value doctrine was associated with the US Supreme Court's ruling in the *Smyth v. Ames* case, 169 US 466 (1898). This method, discussed below, remained a common valuation method until the Court's 1944 *Hope* ruling refined the rate-base valuation issue.

The fair value doctrine focused on the establishment and determination of the rate base where other than book value costs were considered in determining the rate base of the utility. Often, replacement or reproduction costs would be determined. Typically, this implied that the original costs of the utility's assets would be indexed and, thereby, resemble replacement cost values. Replacement costs, in inflationary periods, would lead to a larger rate base. Many utilities aimed to establish the replacement cost as the basis for determining the rate base on which they were entitled to earn a return so that, given the same rate of return, they could increase their profits. Much controversy surrounded the fair use concepts and related rate calculations.

It should be noted that under the fair value doctrine, the actual capitalization of the company in terms of the ratio of owner's equity to debt was not much of a concern. The importance of considering the rate base in the context of owner-provided capital, however, has since become the guideline for the capital costs portion of today's rate proceedings. The *Bluefield* and *Hope* cases, which are discussed in the following section, set the standard for regulated rate making for all utilities.

Rate of Return

The *Bluefield* case of 1923 established the criteria for reasonable rates of return. This case is stated as *Bluefield Water Works & Improvement Company v. Public Service Commission of West Virginia*, 262 US 679 (1923). The *Bluefield* case established that there is no single method for determining a fair or reasonable rate of return. The seminal language in this ruling is stated as

The return should be reasonable, sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

To develop credit, the utility must be able to assure investors that its expected rate of return is the rate that the investor could have earned in other investments with similar risk exposure. In essence, this is the opportunity cost principle contained in introductory economic theory textbooks. This principle concerns itself with the value of the investors' money had it

been employed in alternative investments. Thus, the rate of return on the owner's investment, or owner's equity, should be sufficient to attract other investors into the company. However, the ruling also focused attention on the promotion of the financial soundness of the utility. This major corollary to the return issue requires that the utility be managed efficiently and economically. In other words, without efficient and economical management, the utility would not automatically earn a reasonable return because it would likely exceed its permitted level of expenditures, or it would not be able to keep its service at a required quality level.

The post-Bluefield period is characterized by several cases, the first of which is the 1944 *Hope* case. In this particular case, *Federal Power Commission v. Hope Natural Gas Company*, 320 US 591 (1944), the issue of appropriate capital costs was delineated by the US Supreme Court. In its discussion of this decision, the Court established that legitimate capital costs should consider a combination of depreciation cost, debt service, stock dividends, and rate of return on owner's equity. However, no particular formula or caveats were offered to prescribe the proper combination of these variables. The earning experiences of other water utilities, segments of the utility industry, and unregulated utilities may also be used to establish a reasonable rate of return. In essence, this ruling established that the utility's allowable earnings should be a function of various factors that, altogether, would enable the utility to earn a reasonable return on its investor-provided capital.

Many other cases followed the *Hope* case. These cases were mainly oriented toward the definition of revenue requirements. The *Bluefield* and *Hope* cases are considered the seminal cases in determining the appropriate capital requirements for a regulated utility and for nonregulated utilities acting in a proprietary manner when serving outside-city or contract customers. Together with the *Smyth* case, as shown in Figure 1-2, these three cases may be thought of as the trunk of a tree while rate design issues may be thought of as the secondary branches that, together, shape the canopy of the tree.

Rate Design

Rate design concerns the manner in which individual customers, or groups of customers, are billed. Rate designs are developed to promote equity among customers by charging each customer in such a way that a customer is neither subsidized by nor subsidizes other customers. Several significant rate design issues were addressed and decided in cases such as *Durant v. City of Beverly Hills* (1940), *Village of Niles v. City of Chicago* (1980), and the *City of Pompano Beach v. Olshansky* (1980).

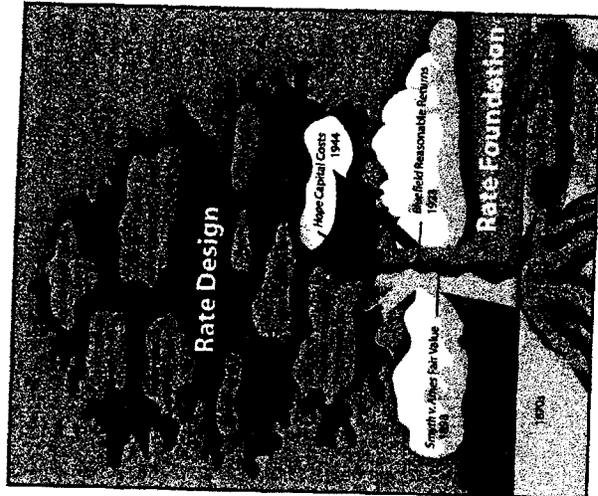


Figure 1-2. History of leading cases for water rates

The first of these cases, *Durant v. City of Beverly Hills*, dealt with presumptions of reasonableness, fairness, and legality. The second case dealt with the burden of proof, and the third dealt with sufficient evidence necessary to overturn the presumptions of reasonableness, fairness, and legality. Additional issues were also established in these leading cases regarding rate design. For example, the *Durant* case provided guidelines for the establishment of rates for outside-city users. Outside users are utility users located outside the municipality's legal boundaries. An additional case where this issue established legal precedent was in *Mohme v. City of Cocoa*, 328 So.2d 422 FL (1976).

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16. RATES, FEES & LEGAL ENVIRONMENT

Reasonableness and Nondiscriminatory Rates

Legal briefs often refer to the norms of reasonable, fair and equitable, and nondiscriminatory rates. In rate-making literature, these terms connote a more specific meaning than that found in standard dictionary definitions. Reasonable water rates are rates that are based on generating sufficient revenues to operate the water utility in a prudent manner and without any undue discrimination among customers. The term *fair and equitable rates*, also called *cost-of-service-based rates*, in rate making refers to a cost causality between rates and the customer's bill. Such rates promote each customer to pay his or her cost share of the service without being subsidized by other customers or without subsidizing other customers. Developing fair and equitable rates means to avoid intraclass (among customers in the same class of service) and interclass (among customers in different classes of service) subsidization. Rates that lack uniformity, or discriminatory rates, are common in water rate making. Discriminatory rates among customers are not necessarily unlawful.

Discrimination among customers may refer to discrimination among different customer classes or among customers in the same customer class. Discrimination among customer classes may refer to the traditional distinctions of residential, commercial, industrial, wholesale, or outside-city customers. Discrimination within a customer class refers to rate schedules that address differences in rates charged to customers within the same class. Only unjust or unreasonable discrimination in rates is not permitted. For example, different rates for two residential customers with the same customer service characteristics, often described as *similarly situated*, constitute unreasonable or unjust discrimination. *Customer service characteristics* in this context does not denote the volume of water used but a difference in the peaking factors related to the service. Charging a larger residential user a higher volume unit rate than a smaller residential user, but absent correspondingly higher peaking factors related to capital costs, likely constitutes an intraclass rate inequity.

It is important to note that these legal standards do not require that a rate design chosen and implemented by a particular utility must be the best rate design, nor have mathematical exactitude, but merely be reasonable. AWWA Manual M1 (2000) has more detailed guidelines on revenue requirements, customer classifications, equitable rates, and rate design.

Burden of Proof

Another significant legal principle is that those who challenge the rates bear the burden of proving that the rates are unjustly discriminatory and unreasonable.

Thus, the burden of proof is heavily weighted against the plaintiffs in a rate proceeding. In other words, those who are dissatisfied with the particular rates in question must prove that these rates were indeed unreasonable and unjustly discriminatory to their interest. Mere complaints that rates are excessive, unjust, or discriminatory will not be sufficient to make a valid complaint. Plaintiffs must provide much more detailed arguments to make their complaints persuasive to the court.

Factors in Defensible Rates

Absent legal and policy constraints to developing cost-based rates, the following factors may be considered in determining reasonably discriminatory rates:

1. Cost of providing water service (revenue requirements) using industry-accepted methodologies
2. Nonresident or outside-city status of user
3. Customer classification practices
4. Customer service characteristics
5. Self-sufficient enterprise and charges or transfers to a city's general fund
6. Unusual expenses compared with past trends
7. Distance from the treatment facilities
8. Cost of installation and maintenance of mains
9. Cost of pumping water
10. Density of population served
11. Cost of reading meters
12. Cost of making service calls
13. Water conservation cost measures
14. Revenue stability issues pertinent to a customer class

All of these factors may provide a basis for establishing service cost differences in serving customers. Cost of service (COS) differences are the cornerstone for designing equitable rates for different customer classes. Of course, the rate analyst should first comply with any state laws or

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those equity requirements. California has tightened the requirements for legally defensible conservation rates.

This chapter will describe how the recent legislative changes in California water rate making have reconciled traditional cost-of-service rate-making goals of avoiding subsidizations of customers, whether between classes (interclass) or within one class (intraclass), with local community goals to promote water conservation. An introductory discussion of inter-generational rate equity, with references to several key legal cases, is also provided since the widely adopted practice of impact (capacity) fees for new customers has generated new concerns regarding rate-making practices and equity rights, including possible property rights, associated with such one-time capital payments.

The chapter is organized so it can be read as a stand-alone treatise on the equity of water rates and conservation with the California experience presented as a case study. It starts with an overview of relevant water pricing legal principles at the federal and state level; it continues with a short review of rate equity concepts and norms based on traditional utility rate literature, with an explanation of rate equity using illustrations and modern terminology and graphics concepts. The following section comprises a review of California legislation and case law regarding water rates and budget rates. A few of those cases are detailed from the cost nexus viewpoint that was more recently addressed in 2009. Next, the 2009 changes to the statutes (AB 2882 and 3030) are discussed with specific references to the water consumption tier components of budget rates and the explicit nexus that now is required between cost-of-service and individual tier consumption rates. The chapter concludes with a summary of California's legal turning points pertaining to water rates and the conclusions drawn from the current status of rate requirements for California and, possibly, other states.

Water Pricing Legal Principles

Chapter 1 of this book reviewed the history of water rates as shaped by legal precedent set in the United States. The foundations for the legal concepts that now are codified in federal and state laws go back to the 19th century. Prompted by customer price exploitation practices exercised by railroads that were granted franchises by the United States, federal laws were enacted to disallow utilities from exercising monopolistic pricing powers. The definition of utility was expanded from the railroad and interstate transportation industries to eventually include electric, gas, water, wastewater, telecommunications, and other utilities. The concepts of fair and just, or equitable, service rates became the principles used to

fight monopolistic pricing behavior. In turn, these concepts paved the path for more comprehensive regulation in the 20th century. As reviewed in chapter 1, these regulatory norms apply to both privately owned and publicly owned utilities. In addition to federal laws, state laws often restate or elaborate on the federal utility rate-making requirements. In general, the 19th- and early 20th-century regulatory norms addressed the capital cost portion of utilities' revenue requirements. Rate-of-return arguments also advanced the requirement of efficiency in operating a utility. An allowable return on capital investments is accompanied with the notion of efficiency in serving customers. Rate design issues became more prevalent from the 1940s. Over time, these cases promoted a clearer understanding of rate equity among customers in terms of the concepts of just, reasonable, fair, and legal rates.

The definition of rate equity used in this book is shown in Figure 9-1. This figure presents a summary of several rate-making terms first described in pages 8 and 9 of chapter 1 of this book. When using the phrase *equitable rates*, these rates contain no subsidization among customers. The emphasis in this definition is on the avoidance of using rates charged to any customers or customer classes that include costs intended to be used to subsidize any other customer(s) or customer class. It does not necessarily pertain to using a community's general fund to assist certain customers such as low-income customers. The provisions of any low-income assistance programs might depend on state laws or other legal provisions applicable to a particular situation. Additional details will be discussed below.

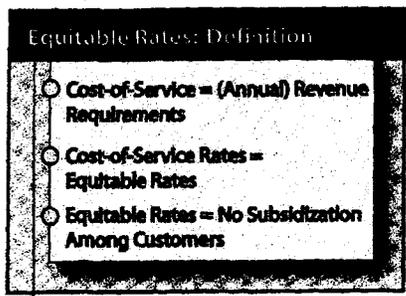


Figure 9-1 Definition of equitable rates

EQUAL PROTECTION

In addition to the well-known cases illustrated in Figure 1-2 of chapter 1, the Equal Protection Clause of the 14th Amendment of the United States Constitution also applies to the pricing of utility services. Equal Protection under the Law requires governments and businesses to treat persons the same way without preferential (advantageous or disadvantageous) treatment. In the context of utility rates and charges, it has mainly been used to complain about ~~unfair takings~~ regarding property condemnations, but it has also been used for rate complaints where rates presumably exceed the cost of providing service. For example, complaints could state that it is not acceptable to charge one residential user more per unit of service than another residential user unless there is an actual utility service reason for doing so. Courts often find that the plaintiffs have not met the burden of proof to demonstrate a lack of rationality in the utility's rate development or alleged overcharges. Court rulings might state that utilities have wide latitude in selecting rate methodologies and rate practices. The same rulings may also caution that differentiation among customers not based on actual differences, such as the cost of service (sometimes expressed in terms such as "utility factors" or "cost-based rates"), might be cause for finding those rates impermissible and subject to redress by the court.³ Thus, pricing practices based on criteria other than utility service factors, other than the utility's customer-service factors or characteristics, may be the basis for legal redress.

Customer service factors may be established in cost-of-service studies. Indeed, cost-of-service studies are conducted in order to determine such differences by allocating user charge revenue requirements to different customer classes based on their respective proportionate class service characteristics. Thus, if the unit cost of serving a relatively larger residential user is higher than the unit cost of serving a relatively smaller residential customer, a higher rate might be defensible. However, if the application of criteria other than those related to the "proportional cost basis," such as race, sex, social desirability, political motivations, customer or customer class income,⁴ or noncost (or unquantifiable costs) based environmental considerations, are the basis for rate making, the resulting rates might not be in compliance with the equal protection provision and

³ For examples, see *Bennett Bear Creek Farm Water and Sanitation Dist. v. City and County of Denver Bd. of Water Comms.*, 928 P.2d. 1254 (Colo., 1996); *General Textile Printing and Processing Corp. v. City of Rocky Mount*, 908 F. Supp. 1295 (E.D.N.C., 1995) (Equal protection claim).

⁴ Admittedly, there are other federal laws that appear inconsistent regarding the low-income criterion. For example, the Clean Water Act of 1972 (PL 92-500) has a user charge provision that would allow a wastewater utility to subsidize wastewater rates for low-income customers by proportionally adding such subsidy costs to the revenue requirements of all other customer classes.

give rise to unjust or undue price discrimination complaints. This does not mean that other criteria cannot be considered when designing rates. To the contrary, such additional criteria can and often should be considered. However, the application of such criteria should be considered after the cardinal legal and technical rate requirements for rate making (see chapter 3) are satisfied. Further discussion on the prioritization of rate design criteria follows below.

State laws will typically have equal protection provisions in their respective statutes that are consistent with the US constitutional provisions. In some instances, courts and public utility commissions express the equal protection requirements using language that refers to the requirement that rates need to be "fair, reasonable, and nondiscriminatory."⁵ Equal protection issues in rate making will likely, but not exclusively, occur in the rate design part of utility services pricing.

Other concepts within federal law that pertain to water rate making include *due process* and *unfair takings*. *Due process* refers to the proper notification procedures associated with rate changes and the avoidance of decisions that are "arbitrary, capricious, or an abuse of discretion." *Takings* refers to the provisions of the 14th amendment of the US constitution that prohibit private property from being taken for public use without due compensation. In the context of water rates and fees, *takings* is an issue usually associated with impact fees. Chapter 6 of this book contains a detailed discussion of impact fees. The earlier chapters of this handbook introduced these legal principles and discussed these terms at greater length. The impact fee issue will be revisited below in the context of the 1994 decision in *Brydon v. East Bay Municipal Utility* California Appellate Court decision, 24 Cal. App.4th 178, 29(Cal.Rptr.2nd) 128 (1994).

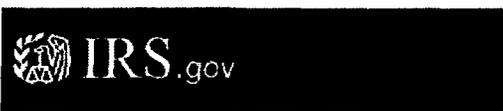
UNJUST PRICE DISCRIMINATION

Price discrimination by itself is not prohibited by law. For example, differentiation of customer classes is a form of discrimination based on the grouping of customers with similar user service characteristics such as residential versus commercial or industrial users, or inside-city versus outside-city customers. Only unjust price discrimination is prohibited. Even otherwise legitimate governmental interests may not result in unjust rates or contain unreasonable discrimination. Equitable rates, by definition, are cost-based rates that avoid unjust price discrimination. Price discrimination is not only limited to interclass prices but can also occur in intraclass (for example between single-family home customers) and intergenerational perspectives (between new users and existing users).

⁵ Kron, *supra* note 1 p. 148.

Composite Corporate Bond Rate Table

FOLDER G, COST OF CAPITAL, CORP BOND RATES



Composite Corporate Bond Rate Table

Legend:

- Corporate Bond Weighted Average Interest Rate = CB Wtd Avg
- Permissible Range = xx to xxx%
- Composite Corporate Bond Rate = CCBR

Note: Under changes to section 412 and the addition of section 430 by the Pension Protection Act of 2006, certain interest rates rely on the corporate bond weighted average computed under section 412(b)(5)(B)(ii)(II) as in effect for plan years starting in 2007. The table below provides those corporate bond weighted averages.

Month/Year	CB Wtd Avg	90 to 100%	CCBR
Feb-11	6.10	5.49 to 6.10	-
Jan-11	6.12	5.51 to 6.12	5.57
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-10	6.14	5.52 to 6.14	5.60
Nov-10	6.17	5.55 to 6.17	5.43
Oct-10	6.21	5.59 to 6.21	5.20
Sep-10	6.24	5.62 to 6.24	5.17
Aug-10	6.28	5.65 to 6.28	5.16
Jul-10	6.32	5.68 to 6.32	5.44
Jun-10	6.34	5.71 to 6.34	5.66
May-10	6.37	5.73 to 6.37	5.67
Apr-10	6.39	5.75 to 6.39	5.84
Mar-10	6.40	5.76 to 6.40	5.90
Feb-10	6.41	5.77 to 6.41	6.01
Jan-10	6.42	5.77 to 6.42	5.88
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-09	6.42	5.78 to 6.42	5.88
Nov-09	6.44	5.80 to 6.44	5.79
Oct-09	6.46	5.82 to 6.46	5.76
Sep-09	6.47	5.83 to 6.47	5.79
Aug-09	6.48	5.83 to 6.48	6.03
Jul-09	6.47	5.83 to 6.47	6.39
Jun-09	6.46	5.81 to 6.46	6.64
May-09	6.43	5.78 to 6.43	6.95
Apr-09	6.39	5.75 to 6.39	7.05
Mar-09	6.35	5.72 to 6.35	7.22
Feb-09	6.32	5.69 to 6.32	6.83
Jan-09	6.29	5.67 to 6.29	6.47
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-08	6.27	5.64 to 6.27	6.64
Nov-08	6.20	5.58 to 6.20	7.72
Oct-08	6.14	5.52 to 6.14	7.90
Sep-08	6.10	5.49 to 6.10	6.98
Aug-08	6.07	5.46 to 6.07	6.76
Jul-08	6.04	5.44 to 6.04	6.79

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2/27/2011

Composite Corporate Bond Rate Table

Jun-08	6.02	5.42 to 6.02	6.69
May-08	6.00	5.40 to 6.00	6.47
Apr-08	5.99	5.39 to 5.99	6.45
Mar-08	5.96	5.36 to 5.96	6.46
Feb-08	5.94	5.34 to 5.94	6.36
Jan-08	5.92	5.33 to 5.92	6.16
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-07	5.90	5.31 to 5.90	6.28
Nov-07	5.89	5.30 to 5.89	6.14
Oct-07	5.88	5.29 to 5.88	6.14
Sep-07	5.86	5.27 to 5.86	6.23
Aug-07	5.84	5.26 to 5.84	6.33
Jul-07	5.83	5.25 to 5.83	6.33
Jun-07	5.81	5.23 to 5.81	6.32
May-07	5.80	5.22 to 5.80	6.01
Apr-07	5.80	5.22 to 5.80	5.98
Mar-07	5.80	5.22 to 5.80	5.84
Feb-07	5.79	5.21 to 5.79	5.85
Jan-07	5.78	5.21 to 5.78	5.89
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-06	5.79	5.21 to 5.79	5.75
Nov-06	5.79	5.21 to 5.79	5.77
Oct-06	5.79	5.21 to 5.79	5.94
Sep-06	5.78	5.21 to 5.78	5.95
Aug-06	5.78	5.20 to 5.78	6.11
Jul-06	5.77	5.19 to 5.77	6.30
Jun-06	5.75	5.18 to 5.75	6.31
May-06	5.74	5.17 to 5.74	6.29
Apr-06	5.74	5.17 to 5.74	6.18
Mar-06	5.75	5.17 to 5.75	5.89
Feb-06	5.75	5.18 to 5.75	5.73
Jan-06	5.77	5.19 to 5.77	5.65
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-05	5.78	5.20 to 5.78	5.72
Nov-05	5.79	5.21 to 5.79	5.78
Oct-05	5.81	5.23 to 5.81	5.68
Sep-05	5.84	5.25 to 5.84	5.44
Aug-05	5.87	5.28 to 5.87	5.42
Jul-05	5.90	5.31 to 5.90	5.37
Jun-05	5.94	5.35 to 5.94	5.26
May-05	5.97	5.38 to 5.97	5.41
Apr-05	6.01	5.41 to 6.01	5.55* (*Corrected Number)
Mar-05	6.03	5.43 to 6.03	5.62
Feb-05	6.07	5.46 to 6.07	5.36
Jan-05	6.10	5.49 to 6.10	5.48
Month/Year	CB Wtd Avg	90 to 100%	CCBR
Dec-04	6.14	5.52 to 6.14	5.57

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10/11/08 5, FIVE... COST OF CAPITAL FOLDERG, COST OF CAPITAL, HISTORICAL PRIME RATE

SEARCH

HOME

INVESTOR RELATIONS

CORPORATE RESPONSIBILITY

CAREERS

LOOKING TO LOG IN?

- About Us
- The Way Forward
- Our Businesses
- Business Principles
- Governance
- Leadership Team
- Newsroom
- Press Releases
- Media Contacts
- Historical Prime Rates**
- History of Our Firm
- Suppliers



Historical Prime Rate

1990 - present		1983 - 1990	
Effective Date	Rate*	Effective Date	Rate*
12-16-08	3.25%	07-31-89	10.50%
10-29-08	4.00%	06-05-89	11.00%
10-08-08	4.50%	02-24-89	11.50%
04-30-08	5.00%	02-10-89	11.00%
03-18-08	5.25%	11-28-88	10.50%
01-30-08	6.00%	08-11-88	10.00%

FOLDER-G, COST OF CAPITAL
GIVE PROMISSORY NOTE

PROMISSORY NOTE

\$527,400

Tucson, Arizona
February 12, 2008

For value received, Five Hundred Twenty-Seven Thousand Four Hundred and no/100 Dollars (\$527,400.00) (the, "Loan"), this Promissory Note ("Note") is made as of the date stated above by Goodman Water Company, an Arizona public service corporation ("Borrower"), to the order of E.C. Development, Inc., an Arizona corporation ("Lender").

RECITALS

- A. Borrower owns and operates a public service corporation and holds a Certificate of Convenience and Necessity ("CC & N") authorizing it to provide the public with water.
- B. Lender is one of the owners and developers of property (the "Property") located within the CC & N.
- C. Pursuant to Decision No. 56118, the Arizona Corporation Commission has authorized Borrower to issue long term debt in the amount of this Promissory Note.
- D. The Borrower desires to borrow funds necessary for the expansion of the water utility plant for storage and pumping, booster, and other facilities necessary to develop the water plant to serve the Property.

AGREEMENT

FOR VALUE RECEIVED, Borrower promises and agrees as follows:

- Payment. Borrower shall pay to the order of Lender the principal sum of Five Hundred Twenty-Seven Thousand Four Hundred and no/100 Dollars (\$527,400.00) (the "Principal Amount"), with interest thereon at the rate of eight and one-half percent (8.5%) per annum from the date of this Note, until paid in full, to be paid as provided below. Principal and interest shall be payable to Lender in lawful money of the United States of America, at 6340 N. Campbell Avenue, Suite 278, Tucson, Arizona 85718, or at such other place as the Lender may from time to time designate in writing.
- Loan. Borrower hereby agrees to use the Loan only for the expansion of the water utility plant for storage and pumping, booster and other facilities necessary to develop the water plant to serve the Property.

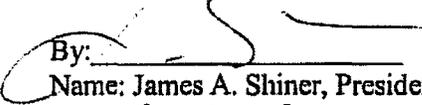
and its successors and assigns and shall be enforceable by the parties hereto and their respective successors and assigns; "Borrower" shall be deemed to include the undersigned and any and all makers, endorsers, payees, sureties and guarantors hereof; "Lender" shall be deemed to include the payee, owner and holder hereof, now and in the future.

14. Choice of Law; Amendment. This Note shall be governed by and construed and enforced under the laws of the state of Arizona. This Note may not be modified or amended except by a writing signed by all parties.

15. Interpretation. This Note constitutes the entire agreement and understanding between the parties with respect to the subject matter hereof and expressly supersedes and revokes all other prior or contemporaneous promises, representations and assurances of any nature whatsoever with respect to the subject matter hereof. The paragraph headings in this Note are solely for the convenience of the parties and shall not affect the interpretation of the provisions hereof. This instrument shall not be construed strictly in favor of or against either Borrower or the Lender, but according to its plain meaning. If any provision hereof shall be held invalid or unenforceable, the remaining provisions shall continue in full force and effect and shall not be impaired thereby.

BORROWER:

Goodman Water Company,
an Arizona corporation

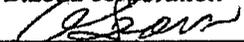
By: 

Name: James A. Shiner, President

Date: 2-12-08

LENDER:

E.C. Development, Inc.,
an Arizona corporation

By: 

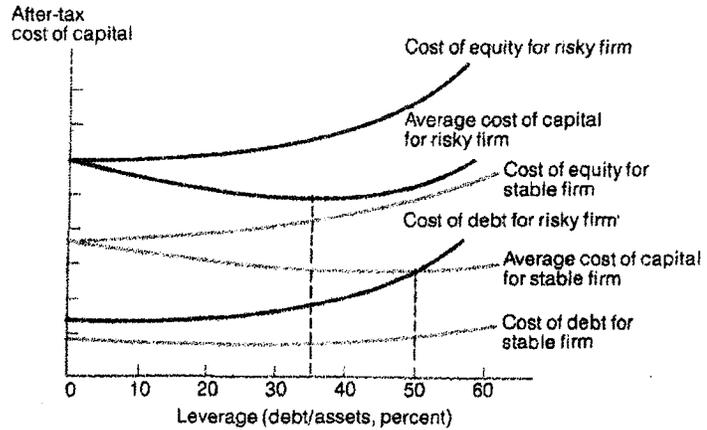
Name: Alexander H. Sears, President

Date: 2-12-08

WESTON & BRIGHAM

firm is planning to raise a given amount of new capital during the year. For a larger or smaller amount of new capital, some other cost figures might be applicable; the optimal capital structure might call for a different debt ratio, and the minimum average cost of capital (k) might be higher or lower. This point is discussed in detail later in the chapter.

Figure 19-5
Hypothetical Cost of
Capital Schedules for
High-risk (R) and Low-
risk (S) Firms



**High-risk and
Low-risk
Firms**

Shown in Figure 19-5 are the cost of capital schedules for a firm in a risky industry (R) and for one in a stable industry (S). Firm R, the one on which Figure 19-4 was based, is Universal Machine; firm S is a relatively stable, safe company. We have already examined the interrelationships of the curves of Universal Machine—after declining for a while as additional low-cost debt is averaged in with equity, the average cost of capital for firm R begins to rise after debt has reached 35 percent of total capital. Beyond this point, the fact that both debt and equity are becoming more expensive offsets the fact that the component cost of debt is less than that of common equity.

While the same principles apply to the less risky firm, its cost functions are quite different from those of Universal Machine. In the first place, S's overall business risk is lower, giving rise to lower debt and equity costs at all debt levels. Further, its relative stability means that less risk is attached to any given percentage of debt; therefore, its costs

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FOLDER G
WIDOW & ORPHAN



Widow-and-orphan stock is relatively low-risk stock from well-known firms that pay high dividends. Widow-and-Orphan stocks are generally chosen during bear markets and ignored during bull markets. This is because these companies are perceived to be able to maintain their dividend payment schedule through difficult financial times. A widow-and-orphan stock is a conservative investment with limited possibility for large gains or losses. In brief it is a stock characterized by smaller than average price movements, a relatively high dividend, and little likelihood of dividend reduction or serious financial problems.

In the past, Widow-and-orphan stocks were considered to be among the most desirable of stock options. Some widow and orphan offerings were associated with companies that held a monopoly in a given industry. Utilities were often referred to as widow-and-orphan stocks because of their monopoly and dividend yield.

A Widow-and-orphan-stock was the blue chip stock of its day. Banks were excluded from this class as the result of their involvement in the bubble and crash of 1929. It was not until several years after the government-instituted regulations like the Glass-Steagall Act, which separated investment banking and "regular" commercial banking, that "widows and orphans" was again applied to commercial banks.

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FOLDER - G
WIDOW & ORPHANS

- Top Searches
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Do "Widow And Orphan" Stocks Still Exist?

by Rick Wayman (Contact Author: [Biorephyl](#))

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Filed Under: [Banking](#), [Bonds](#), [Entrepreneur](#), [Stocks](#)

In the past, the term "widows and orphans" was used to describe stocks with a relatively high degree of safety and dividend income. Because they had relatively minimal risk and provided income to feed the family, these kinds of stocks were literally thought to be the only investments suitable for widows and orphans. The term is noteworthy because it was generally used during market bottoms, but today it means something different. (Explore arguments for and against company dividend policy, and learn how companies determine how much to pay out, in [How and Why Do Companies Pay Dividends?](#))

ONLINE CURRENCY TRADING

CURRENCY FORECAST

EUR/USD

POUND USD

FREE PRACTICE ACCOUNT

FXCM [WWW.FXCM.COM](#)

CURRENCY TRADING INVOLVES SIGNIFICANT RISK OF LOSS

History of the Stock
A widow-and-orphan stock was the blue chip stock of its day: the stock of a large well-known firm that was thought to have an unassailable market leadership position and that paid a "good" dividend. This term was generally applied to utility stocks (electric, gas and telephones). Utilities are often referred to as widow-and-orphan stocks because of their monopoly (or, if you prefer, government-mandated market leadership) and dividend yield. Banks were excluded from this class as the result of their involvement in the bubble and crash of 1929. It was not until several years after the government-instituted regulations like the Glass-Steagall Act, which separated investment banking and "regular" commercial banking, that "widows and orphans" was again applied to commercial banks. Depending on the business cycle, the term was also applied to railroad and auto stocks.

E. WIFA Loan & Subsidy Rates -- The WIFA Board of Directors has established a target interest rate ranging between 70% and 95% of tax-exempt AAA Bond Rate for government entities and 70% to 95% of the prevailing prime rate for non-government entities. The subsidy rate is based on the local fiscal capacity which is measured by the area's median household income, user rates and charges, the community's outstanding and proposed debt and cost effectiveness of project. Interest rates/subsidies on individual loans will be set pursuant to the criteria below:

- ✓ Priority of the project.
- ✓ Local fiscal capacity of the area served by the system requesting assistance; and,
- ✓ Lending capacity of Arizona's DWRP.

HOLDER - G

~~XXXXXXXXXXXXXXXXXXXX~~
WIFA LOAN RATES, 2008

FOLDER C,
COST OF CAPITAL
CURRENT WIFA
RATE. JPG

RE: WIFA inquiry - Message (HTML)

Menus Message Developer

All File Edit View Insert Format Tools Table Actions Help

Reply Reply to All Forward

Toolbars

You replied on 3/10/2011 6:55 AM.

From: Veronica Rivera [vriviera@azwifa.gov] Sent: Thu 3/3/2011 11:17 AM
To: Schoemperlen, Jim
Cc:
Subject: RE: WIFA inquiry

OK. For FY 10 the average was 2.83% for public and 3.68% for privates for 20-year construction loans.
We also offer 1% interest for 3-year design loans. Finally. we have no application fees or closing costs.

From: Schoemperlen, Jim
Sent: Thursday, March 03, 2011 11:10 AM
To: Veronica Rivera
Subject: RE: WIFA inquiry

Thanks Veronica, I saw that but what I am looking for is a Range for Interest Rates if my clients would be successful in obtaining a loan through the WIFA program. That way they can compare to commercial rates and determine whether or not this is something they would want to look into.

Regards,

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1 that the application was insufficient pursuant to the requirements of the Arizona Administrative
2 Code.

3 4. On August 23, 2005, the Company provided additional documentation in support of its
4 application.

5 5. On September 16, 2005, Staff filed a Sufficiency Letter indicating the application had
6 met the sufficiency requirements of A.A.C. R14-2-402(C).

7 6. By Procedural Order dated September 22, 2005, the matter was set for hearing in
8 Tucson, Arizona, and procedural guidelines and deadlines were established.

9 7. On November 18, 2005, Staff filed its Staff Report that recommends approval of the
10 application.

11 8. The hearing convened as scheduled on December 8, 2005, at the Commission's offices
12 in Tucson, Arizona.

13 9. Goodman currently provides water utility service to approximately 500 connections in
14 an 800 acre development known as Eagle Crest located near Oracle Junction in Pinal County,
15 Arizona.

16 10. Goodman was originally incorporated in 1985 as Panarama Properties, Inc. dba
17 Goodman Water Company. The Commission approved a CC&N in Decision No. 56118 (September
18 15, 1988). Pursuant to Decision No. 65651¹ (February 18, 2003), on March 5, 2003, Goodman filed
19 a Notice of Name Change, indicating that the corporation changed to Goodman Water Company.
20 The only shareholders of Goodman are Mr. James Shiner, President, Mr. Alexander Sears and D.R.
21 Horton, Inc.

22 11. The proposed extension area will extend the Company's current service territory by
23 approximately 188 acres. The legal description of the proposed extension area is attached hereto, and
24 incorporated by reference, as Exhibit A. The proposed extension area is contiguous to Goodman's
25 current CC&N.

26 12. Goodman currently has two wells with a total production capacity of 1,240 gallons
27

28 ¹ Decision No. 65651 authorized Goodman to issue \$1,047,680 of common stock.

1 per minute (gpm), and 400,000 gallons of storage capacity. The existing production and storage can
2 serve approximately 1,000 connections.

3 13. Based on historical growth rates, Goodman's current CC&N area could have a total of
4 1,300 customers at the end of five years. The Company predicts 450 additional customers in the
5 proposed extension area at the end of five years.

6 14. The proposed extension area will be developed in two phases. Ground breaking for
7 the first phase will not occur prior to June 2006. The development will be a mixed use community
8 with approximately 420 residential lots and 27 acres of commercial development. The master
9 developer is Eagle Crest West LLC, which is owned by Mr. Shiner and Mr. Sears.

10 15. The Company proposes to construct a new 800 gpm well and a 530,000 gallon storage
11 tank in the proposed extension area which will serve customers in the Company's existing CC&N
12 area as well as in the proposed extension area.

13 16. Staff believes that the existing system has adequate production and storage capacity to
14 serve the existing and proposed CC&N extension area within a conventional five-year planning
15 period and can reasonably be expected to develop additional storage and production as required in the
16 future.

17 17. Goodman will finance the facilities required for the expansion through a combination
18 of a sale of stock² and Developer Line Extension Agreements. Advances in Aid of Construction are
19 often take the form of Main Extension or Line Extension Agreements ("MXAs"). The minimum
20 criteria for MXAs are established by A.A.C. R14-2-406. Usually the agreements require the
21 developer to design, construct and install (or cause to be installed), all facilities to provide adequate
22 service to the development. The developer pays all costs of constructing the required facilities.
23 Upon acceptance of the facilities by the utility, the developer conveys the facilities to the developer
24 through a warranty deed. Utility companies will often refund 10 percent of the annual water revenue
25 associated with development for a period of 10 years. Staff recommends that Goodman file with
26 Docket Control, as a compliance item in this docket, for Staff review and approval, a copy of the
27

28 ² The Company understands that it is required to come to the Commission for financing authority.

1 fully executed main extension agreements for water facilities for the extension area within 365 days
2 of a decision in this matter.

3 18. The Arizona Department of Environmental Quality ("ADEQ") has determined the
4 Company's existing system is currently delivering water that meets the water quality standards
5 required by Arizona Administrative Code, Title 18, Chapter 4.

6 19. The U.S. Environmental Protection Agency ("EPA") has reduced the arsenic
7 maximum contaminant level ("MCL") in drinking water from 50 micrograms per liter (" $\mu\text{g/l}$ ") to 10
8 $\mu\text{g/l}$. The date for compliance with the new MCL is January 23, 2006. The most recent lab analysis
9 by the Company indicates that the arsenic level in its source supply wells is 2 $\mu\text{g/l}$. Based on this
10 arsenic concentration, the Company is in compliance with the new arsenic MCL.

11 20. Goodman is within the Tucson Active Management Area. Because Goodman supplies
12 less than 250 acre-feet of water annually for non-irrigation use, it is considered a "small provider"
13 and is not subject to the gallons per capital per day ("GPCD") limit and conservation rules, and is
14 only required to monitor and report water use. ADWR indicates that Goodman is in compliance with
15 its monitoring and reporting requirements.

16 21. A Curtailment Plan Tariff is an effective tool to allow a water company to manage its
17 resources during periods of shortages due to pump breakdowns, droughts, or other unforeseeable
18 events. Goodman has an approved Curtailment Plan Tariff that has been in effect since February 18,
19 2003.

20 22. The Company is current with its property and sales taxes, and is in compliance with all
21 Commission Orders and rules.

22 23. Goodman has proposed to provide water utility service to the extension area under its
23 authorized rates and charges. Staff concurs.

24 24. Every applicant for a CC&N and/or CC&N Extension is required to submit to the
25 Commission evidence showing that the applicant has received the required consent, franchise or
26 permit from the proper authority. If the applicant operates in an unincorporated area, the company
27 has to obtain a franchise from the county. Staff recommends that Goodman be required to file with
28 Docket Control, as a compliance item in this docket, a copy of the franchise agreement from Pinal

1 County for the requested area within 365 days of the decision in this matter.

2 25. At the time of the hearing, Goodman submitted evidence that it had applied to Pinal
3 County for a franchise, but as of the date of this Order, had not submitted a copy of the County
4 franchise as recommended by Staff.

5 26. Staff further recommends that Goodman file with Docket Control as a compliance
6 item in this docket, a copy of the developer's Certificate of Assured Water Supply for the "Eagle
7 Crest West" extension area, within 365 days of the effective date of this Order.

8 27. Staff also recommends that the Decision granting the requested CC&N extension be
9 considered null and void should Goodman fail to meet any of Staff's recommended conditions within
10 the times specified.

11 28. Because an allowance for the property tax expense of Goodman is included in the
12 Company's rates and will be collected from its customers, the Commission seeks assurances from the
13 Company that any taxes collected from ratepayers have been remitted to the appropriate taxing
14 authority. It has come to the Commission's attention that a number of water companies have been
15 unwilling or unable to fulfill their obligation to pay the taxes that were collected from ratepayers,
16 some for as many as twenty years. It is reasonable, therefore, that as a preventive measure Goodman
17 should annually file, as part of its annual report, an affidavit with the Utilities Division attesting that
18 the company is current in paying its property taxes in Arizona.

19 CONCLUSIONS OF LAW

20 1. Goodman is a public service corporation within the meaning of Article XV of the
21 Arizona Constitution and A.R.S. §§ 40-281 and 40-282.

22 2. The Commission has jurisdiction over Goodman and the subject matter of the
23 application.

24 3. Notice of the application was provided in accordance with law.

25 4. There is a public need and necessity for water service in the proposed extension area
26 set forth in Exhibit A.

27 5. Goodman is a fit and proper entity to receive a CC&N to provide water service in the
28 proposed extension area.

A-46

1 IT IS FURTHER ORDERED that Goodman Water Company shall annually file as part of its
2 annual report, an affidavit with the Utilities Division attesting that the Company is current in paying
3 its property taxes in Arizona.

4 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

5 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

6
7 *Jeffrey K. Roth-Miller*
8 CHAIRMAN

[Signature]
COMMISSIONER

9
10 *[Signature]*
11 COMMISSIONER

[Signature]
COMMISSIONER

[Signature]
COMMISSIONER

12
13 IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive
14 Director of the Arizona Corporation Commission, have
15 hereunto set my hand and caused the official seal of the
16 Commission to be affixed at the Capitol, in the City of Phoenix,
17 this 2nd day of Feb., 2006.

[Signature]
BRIAN C. McNEIL
EXECUTIVE DIRECTOR

18 DISSENT _____

19
20 DISSENT _____

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ORIGINAL

FOLDER - H, GOODMAN WATER EXPANSION PLANT
ECR WEST CANAL, 04020
PDE

RECEIVED

BEFORE THE ARIZONA CORPORATION COMMISSION

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KRISTIN K. MAYES
Chairman

200 APR -2 P 2:16

GARY PIERCE
Commissioner

AZ CORP COMMISSION
DOCKET CONTROL

PAUL NEWMAN
Commissioner

Arizona Corporation Commission

DOCKETED

SANDRA D. KENNEDY
Commissioner

APR -2 2010

BOB STUMP
Commissioner

DOCKETED BY *[Signature]*

IN THE MATTER OF THE APPLICATION OF
GOODMAN WATER COMPANY FOR AN
EXTENSION OF ITS CERTIFICATE OF
CONVENIENCE AND NECESSITY

Docket No. W-02500A-05-0443

Motion To Withdraw Application

On February 2, 2006, in Decision No. 68444 (the "Decision"), the Arizona Corporation Commission (the "Commission") approved an extension of the Certificate of Convenience and Necessity ("CC&N") held by the Goodman Water Company (the "Company"). The owner of the land within the territory affected by the Decision wished to develop that property, and having a committed water utility was (and always is) a precondition for its successful development. Further descriptions of the efforts undertaken by the landowner can be found in the Procedural Order entered by the Administrative Law Judge in this matter on the 13th day of April, 2007. After several years of efforts to identify a wastewater utility and to rezone the property, the landowner ultimately faced a collapsed real estate market, as a consequence of which all previous efforts became unavailing, and all present efforts, deferred.

As a result, the landowner was unable to obtain a Certificate of Assured Water Supply, and the Company cannot provide the Commission, at least during the timeframes

A 49

1 previously established, a copy of the Certificate or with a main extension agreement, both
2 being the predicates for extending its CC&N as described in Decision No. 68444.

3 While the landowner and the Company both are confident that in the fullness of time
4 the conditions for the development of the property will come again, the Company is
5 mindful that the Commission's previous approval of an extension is unlikely to be repeated.
6 Consequently, Goodman Water Company respectfully moves that the application it filed in
7 this matter, to extend its Certificate of Convenience & Necessity, be withdrawn, without
8 prejudice, so that the same may be refiled at such time as the landowner may be able to
9 accomplish the rezonings and assured water supply certifications that are a prerequisite to
10 the development of the property in question.

11 RESPECTFULLY SUBMITTED this 2nd day of April, 2010.

12 LEWIS AND ROCA

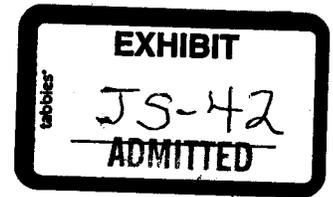
13
14 

15 Michael F. McNulty
16 Lewis and Roca, LLP
17 One South Church Avenue, Suite 700
18 Tucson, Arizona 85701-1611
(520-629-4453)
MMcNulty@LRLaw.com
Attorneys for Goodman Water Company

19 ORIGINAL and thirteen (13) copies
20 of the foregoing filed this 2nd day of
21 April, 2010, with:

22 Arizona Corporation Commission
23 Utilities Division
24 Docket Control
25 1200 W. Washington Street
26 Phoenix, Arizona 85007

ORIGINAL



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BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

RECEIVED
2011 MAY -2 A 10:21
ARIZONA CORPORATION COMMISSION

Notice of Filing

James Schoemperlen, an Intervenor, hereby provides notice of filing his direct testimony in the above referenced matter.

Respectfully Submitted this 2nd day of May, 2011.

Arizona Corporation Commission
DOCKETED

MAY 2 2011

A handwritten signature in cursive script, appearing to read "James Schoemperlen".

James Schoemperlen
Intervenor

DOCKETED BY

Rebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

1 An Original and Thirteen Copies

2 Of the foregoing filed this 5/2/11

3

4

5 Docket Control

6 Arizona Corporation Commission

7 1200 West Washington

8 Phoenix, Arizona 85007

9

10 Copies of the foregoing hand delivered/

11 Mailed this 5/2/11

12

13 Jane L. Rodda

14 Administrative Law Judge

15 Hearing Division

16 Arizona Corporation Commission

17

18 Janice Alward, Chief Counsel

19 Legal Division

20 Arizona Corporation Commission

21

22 Ayesha Vohra

23 Legal Division

24 Arizona Corporation Commission

25

26 Steven M. Olea, Director

27 Utilities Division

28 Arizona Corporation Commission

29

30

31

32

Rebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

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Rebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

REBUTTAL TESTIMONY OF

JAMES SCHOEMPERLEN

**IN RESPONSE TO TESTIMONY FROM MR MARLIN SCOTT, JR AND MR JUAN C.
MANRIQUE OF THE ARIZONA CORPORATION COMMISSION**

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)

May 2, 2011

Rebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

Schedule – A Projection of Actual Returns Based on Staff Adjustments

Schedule – B Projected Return if Only Rate Base is Adjusted.

Schedule – C Projection of Adjustment to Achieve 9% Ave. Returns

Schedule – D SAS Analysis of Time Series Data

1

2 **Q1. Please state your name, occupation and address.**

3 A1. James Schoemperlen, Corporate Controller for Sargent Aerospace in
4 Tucson, my home address is 39696 S. Horse Run Drive.

5 **Q2. On whose behalf are you testifying?**

6 A2. I am testifying on behalf of myself as an intervenor in this case.

7 **Q3. Please describe your educational background and professional
8 experience.**

9 A3. I am a Certified Public Accountant; I am the Corporate Controller for
10 Sargent in Tucson which is an Aerospace Company. I have a BBA in
11 Accounting from the University of Wisconsin. I have a Master's of Science
12 Management from the University of Wisconsin with concentration in
13 Finance.

14 **Q4. Briefly Summarize your work experience.**

15 A4. Brief summary as follows:

16 As Corporate Controller for Sargent in Tucson I have prepared numerous
17 analysis for large capital additions including a recent significant expansion
18 for the Tucson operations and I have led our mergers and acquisitions
19 efforts analyzing numerous potential targets , Prior to that I was a divisional
20 controller for Walbro Engine Management in Tucson, Prior to that I was
21 controller for Lear Corporation in Janesville Wisconsin where I participated
22 in a major plant expansion using robotics and was successful in obtaining
23 significant funding from the state of Wisconsin for that expansion, Prior to
24 that I held various Controllershship positions with Motorola in Chicago IL for
25 20 years and performed the analysis for major plant expansions both
26 domestic and international , Prior to that I worked as an Auditor for KPMG,
27 one of the largest audit firms in the world and had concentrated audit
28 experience in both commercial manufacturing and health care.

29 **Q5. What is the scope of your testimony here?**

30 A5. I am testifying in opposition to positions taken by the Arizona Corporation
31 Commission Staff (Staff).

32 **Q6. Please summarize the areas where you have problems with positions**
33 **taken by the Arizona Corporation Commission staff.**

34 **A6. I have two main objections to Staffs analysis of the GWC proposal. Required**
35 **rate of return (i.e. Marginal Cost of Capital) and rate design under Excess**
36 **capacity / Intergenerational rate inequity.**

37

38 **REQUIRED RATE OF RETURN**

39 I believe there are problems with how staff has developed the overall
40 recommended rate of return for Goodman Water Company (GWC).
41 Although Staff uses methods which are somewhat different to what GWC
42 used, their analysis suffers from the same significant fundamental problem
43 which affects GWC, namely a biased selection of comparative companies
44 because Staff has used the same set of comparative companies that GWC
45 used. On pages 7 through 13 of my filing in opposition to the GWC rate
46 increase, I noted that 5 of the 6 stocks picked were on the list of best Water
47 Utility performing stocks for the last 5 years and outperformed the Dow
48 Jones Water Utility Index for that period, which indicates the comparison
49 stocks have been "Cherry Picked" rather than a true representative sample
50 to reflect what is happening with the average utility company. In addition,
51 Staff noted on Page 6, line 15 and 16 that the average capital structure for
52 the sample water utilities was 52.6% debt and 47.4 percent equity also on
53 line 12, they noted that GWC had an 18.3% debt and 81.7% and later
54 accepted that as the capital structure for GWC with neither any downward
55 adjustment in GWC required rate of return for carrying less debt (more on
56 that later), nor any explanation for accepting the GWC capital structure.

57

58 It is a fundamental financial fact of the risk/return relationship that if there
59 is more debt, the shareholders will require a higher return (this means that
60 any un-adjusted returns of the sample companies betas – expected return -
61 will be much too high in comparison with GWC), yet Staff continued to use
62 the Betas of these companies to determine the expected rate of returns
63 without making any adjustment to reduce that return derived for the

64 difference in capital structure, nor do they adjust the GWC capital structure
65 to represent the average of the sample.

66
67 Staff has also just accepted the GWC cost of debt of 8.5% as the proposed
68 cost of debt in their capital structure. As I note on page 23 of my response
69 in opposition to the GWC rate increase, GWC debt is held by EC
70 Development and the President of EC Development is Alexander Sears who
71 is also Chairman and CEO of GWC. Therefore the debt rate was not
72 obtained based on an arm's length transaction and should not be allowed.
73 As I indicated in my previous filing, current borrowing from WIFA is
74 available at 3.68%.

75
76 I have already indicated that the Marginal Cost of Equity has been
77 misstated by not adjusting for differences in capital structure but there is a
78 further issue that the overall cost of capital will be reduced by a more
79 appropriate mix of debt and equity. On page 23 of my response on the
80 GWC rate request I show how the stable firm will minimize their cost of
81 capital with a 50/50 mix of debt and equity. Staff has completely ignored
82 the effect of an efficient capital structure in lowering the cost of capital. On
83 page 25 of my response to the GWC rate request, I indicate how I have
84 calculated an 8% Marginal Cost of Equity and an overall Marginal cost of
85 capital of 7.16% using a more appropriate capital structure. It should be
86 noted that although the difference between the 9% Staff calculates and the
87 7.16% I calculated sounds small, the effects of small changes are significant
88 in the final rates determined.

89
90 Finally, I believe that when Staff performs their duty of proposing required
91 rates of return they have the burden of proof in demonstrating that the
92 rates are not biased and will not lead to biased results or unfair rate
93 structures, that they are based on arms length transactions and employ an
94 efficient cost of capital structure. I do not believe they have accomplished
95 this here.

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EXCESS CAPACITY THE RATE STRUCTURE AND INTERGENERATIONAL RATE INEQUITIES.

Staff attempts to make calculations for excess capacity. I object to the calculations based on two issues, determination of excess capacity and statistical methods used.

Excess Capacity

In some places the calculations assume that if by 2014, the GWC plant will be used and useful, the entire cost should be included (Example the portion of the 530,000 tank capacity required included calculations out to 2014) and in other places, they consider whether or not the plant and equipment are actually connected and delivering service to customers (albeit no calculations were made there to calculate what portion of the CAPACITY of what is connected would be used by 2014). We clearly see this in calculation of the 530,000 gallon capacity plant used and useful under item E and calculation of water mains remove (page 5 and page 6). Obviously a system should be properly sized based on CAPACITY because excess capacity will lead to excess costs.

In addition, by removing excess capacity, based on what they expect to achieve in total customers by 2014, there is significant **intergenerational rate inequity** built into the rate design. Since as indicated there were 621 customers by year end 2009 (test year), who pays for the unused capacity until we get to 875 customers? **Also, if we are calculating total return (and therefore required rates) based on 621 current customers, this will inherently lead to excess returns in the future as I will demonstrate later.**

Further, as I indicated in my original filing on page 5, Mr. Mark Taylor of Westland Resources Inc., has indicated that the waterworks is designed for approximately 1,291 equivalent housing units and ACC staff itself has

128 determined that the capacity of the GWC waterworks is approximately
129 1,800 equivalent housing units. In addition, Staff itself in their response has
130 indicated the system could support up to 3,000 connections. Staff has not
131 considered taking any of the excess capacity off between 875 units to 1,291
132 or 1,800 let alone 3,000 connections. The Staff proposed rate design
133 indicates that it should include the capacity to 875 units (more on this
134 later). Who pays for the capacity to 875 units until that is achieved? Staff
135 proposes that would be current customers. **This is intergenerational rate**
136 **inequity and it is significant as I demonstrated in my original filing.** This
137 violates all the concepts of fair and just, or equitable service rates as
138 covered by the Bluefield Water Works v Public Service Commission of West
139 Virginia and Durant v. City of Beverly Hills.

140
141 Imagine if an Entrepreneur built a hotel for 1,200 customers monthly in a
142 market that normally had only 620 customers but said to those customers
143 I'm going to increase your hotel bill to cover 1,200 customers. Do we think
144 this Entrepreneur would stay in business very long? This in effect is what
145 has been proposed. The only reason the water company could do it is
146 because they have a monopoly and the regulating body responsible allows
147 it.

148
149 What happens if the housing depression continues and we never get to 875
150 customers? Then of course we would have excess capacity that has not
151 been identified as such in this analysis.

152
153 Schedule A attached shows the effect of the rate adjustments if only those
154 proposed by Staff are made. In this schedule I start with GWC proposed
155 return in base year as GWC adjusted it (I included the Salary increase and
156 Property tax increase although I believe they are unreasonable). I included
157 the Staff recommendation of 9% return in base year and the \$290,613 rate
158 base adjustment as proposed by Staff (Net rate base of \$1,739,712 which
159 assumes the capacity if only 875 customers). The analysis shows that

160 although we start with 9% rate of return, as you add customers (assume 7%
161 customer growth to uniformly get to the 875 by end of 2014), the yearly
162 return grows to 16.4% by the end of the period and that average
163 annual return grows to a return of 12.1% over the rate period by
164 the end of 2014. So how does this happen? It's because they are setting a
165 9% return based on 621 customers. When you add customers to get to
166 875, your return must grow! In addition, no adjustment is made based on
167 what Staff proposes for the effect of fixed and variable costs (i.e. costs do
168 not grow proportionally to revenue) and the 621 customers are expected
169 to pay the costs for all 875 customers initially. All of this as the calculations
170 demonstrate adds up to major Intergenerational Rate
171 inequity and an unfair and discriminatory rate
172 structure which is unfair and unjust in its
173 consequences since it will result in rates among the highest in all of
174 Arizona as demonstrated in my initial response to the GWC request. It
175 should also be noted that even if excess capacity is taken off based on
176 percentage of customers between 621 customers and 875 over the years
177 until the 875 customers are achieved (See attached Schedule –B,
178 $\$1,739,712/875*621 = \$1,234,698$), the average return will still be 11.2%
179 over the period. It is not until the starting average return is adjusted to
180 5.8% that the overall average rate of return achieved will become 9% over
181 the period (See attached Schedule – C). Instead of concentrating on initial
182 return, the Staff should concentrate on average rate of return over the
183 period, here starting with a 5.8% cost of capital and removing excess
184 capacity properly. Also Staff needs to take the excess capacity off
185 between 875 equivalent units AND the 1,291 equivalent units already
186 admitted by GWC.
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Statistical Methods Used

Staff indicates that they are using linear regression analysis to come up with 875 customers by the end of the rate period 2014. It should be noted that the data they are trying to forecast is "Time Series" data. In Schedule – D, I have included an article from the developers of SAS software which is recognized as the premier tool in the market for all types of forecasting purposes. They state in part "In regression analysis, if error terms are not independent (*autocorrelated*), the efficiency of the ordinary least-square (OLS) parameter estimates is adversely affected and the standard error estimates are biased. **This happens frequently with time series data** (emphasis added). Ordinary regression analysis assumes that the error variance is the same for all observations. When the error variance is not constant, the data are said to be *heteroscedastic*, and ordinary least-squares estimates are inefficient." Translation, Staff used an incorrect method statistically to try to forecast the 875 customers at the end of 2014. Clearly, just based on validity of the method used there is no proof that there will be 875 customers at the end of 2014. However, just using common sense, since we are in the throes of the largest single meltdown in housing, it is not clear that we will see 875 customers in the development any time in the foreseeable future and the capacity developed for that build out is clearly excess.

Goodman Water Co
Projection of Actual Returns Based on Staff Adjustments
Schedule - A

	1	2	3	4	5	
	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	
Revenue	700,939	750,603	803,653	861,218	987,635	
Total Cost Before Inc. Taxes	475,765	487,012	499,027	512,063	540,693	
Income Taxes	68,600	85,215	102,964	122,222	161,771	
Total Cost**	544,365	572,228	601,990	634,286	702,464	
Operating Income	156,574	178,375	201,663	226,932	285,172	\$ 184,409.08
Net Rate Base*	1,739,712	1,739,712	1,739,712	1,739,712	1,739,712	
Total Customers	621	665	712	763	875	
Revenue per Customer	1,128.73	1,128.73	1,128.73	1,128.73	1,128.73	
Return on Rate Base	9.0%	10.3%	11.6%	13.0%	16.4%	
Σ of Returns	1,048,716					
Average Annual Return						

* Plant and Equipment supports 825 customers
 ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		
Variable	Purchased Power	\$ 27,066.00	\$ 27,066.00
Variable	Chemicals		
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 2,783.00	\$ 2,783.00
Fixed	Rent		
Fixed	Transportation Expenses	\$ 9,669.00	\$ 9,669.00
Fixed	Insurance - General Liability		
Fixed	Insurance - Health and Life	\$ 20,000.00	\$ 20,000.00
Fixed	Regulatory Commission Expense - Rate Case	\$ 378.00	\$ 378.00
Variable	Miscellaneous Expense	\$ 228,853.00	\$ 228,853.00
Fixed	Depreciation Expense	\$ 2,988.00	\$ 2,988.00
Variable	Taxes Other Than Income	\$ 18,502.00	\$ 18,502.00
Fixed	Property Taxes	\$ 0.67	\$ 0.33
	Sub Total	\$ 475,765.00	\$ 158,741.00
direct Calc	Income Tax - Marginal rate at	\$ 68,600.06	\$ 68,600.06
	Total Expenses before interest	\$ 544,365.06	\$ 386,082.40
		66.6%	33.4%

		1	2	3	4	5
Tax Calc's	Revenue	\$ 700,939.00	\$ 750,602.95	\$ 803,653.09	\$ 861,218.13	\$ 987,635.47
	Operating Expenses	\$ 475,765.00	\$ 487,012.35	\$ 499,026.56	\$ 512,063.26	\$ 540,692.88
	Synchronized Interest	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00
	Arizona Taxable Income	\$ 197,339.00	\$ 235,755.61	\$ 276,791.52	\$ 321,319.86	\$ 419,107.59
	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%	6.9680%
	Arizona Income Tax	\$ 13,750.58	\$ 16,427.45	\$ 19,286.83	\$ 22,389.57	\$ 29,203.42
	Federal Taxable Income	\$ 183,588.42	\$ 219,328.15	\$ 257,504.69	\$ 298,930.30	\$ 389,904.17
0.15		\$ 50,000.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00
0.25		\$ 75,000.00	\$ 6,250.00	\$ 6,250.00	\$ 6,250.00	\$ 6,250.00
0.34		\$ 100,000.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00
0.39		\$ 335,000.00	\$ 32,599.48	\$ 46,537.98	\$ 61,426.83	\$ 77,582.82
0.34	10,000,000	\$ -	\$ -	\$ -	\$ -	\$ 18,667.47

Goodman Water Co
Projection of Return if Only Rate Base is Adjusted.
Schedule - B

	1	2	3	4	5
	<u>Dec-10</u>	<u>Dec-11</u>	<u>Dec-12</u>	<u>Dec-13</u>	<u>Dec-14</u>
Revenue	620,848	664,838	711,826	762,814	874,786
Total Cost Before Inc. Taxes	475,765	487,012	499,027	512,063	540,693
Income Taxes	33,960	48,121	63,248	79,662	115,708
Total Cost**	509,725	535,134	562,275	591,725	656,401
Operating Income	111,123	129,704	149,551	171,088	218,385
Net Rate Base*	1,234,698	1,322,181	1,328,146	1,336,099	1,739,712
Total Customers	621	665	712	763	875
Revenue per Customer	999.76	999.76	999.76	999.76	999.76
Return on Rate Base	9.0%	9.8%	11.3%	12.8%	12.6%
Σ of Returns	779,852				
Average Annual Return	11.2%				

• Plant and Equipment supports 825 customers
 ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		
Variable	Purchased Power	\$ 27,066.00	\$ 27,066.00
Variable	Chemicals		
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 2,783.00	\$ 2,783.00
	Rents		
	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
	Insurance - Health and Life		
Fixed	Regulatory Commission Expense Rate Case	\$ 20,000.00	\$ 20,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 228,853.00	\$ 228,853.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 18,502.00	\$ 18,502.00
	Sub Total	\$ 475,765.00	\$ 317,024.00
			\$ 158,741.00
direct Calc	Income Tax -Marginal rate at	\$ 33,960.46	\$ 33,960.46
	Total Expenses before Interest	\$ 509,725.46	\$ 634,048.67
			\$ 351,442.80
		66.6%	33.4%

Tax Calc's							
	Revenue	\$ 620,848.32	\$ 664,837.58	\$ 711,826.10	\$ 762,813.64	\$ 874,786.29	
	Operating Expenses	\$ 475,765.00	\$ 487,012.35	\$ 499,026.56	\$ 512,063.26	\$ 540,692.88	
	Synchronized Interest	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00	\$ 27,835.00	
	Arizona Taxable Income	\$ 117,248.32	\$ 149,990.23	\$ 184,964.53	\$ 222,915.38	\$ 306,258.41	
	Arizona State Income Tax Rate	6.9680%	6.9680%	6.9680%	6.9680%	6.9680%	
	Arizona Income Tax	\$ 8,169.86	\$ 10,451.32	\$ 12,888.33	\$ 15,532.74	\$ 21,340.09	
	Federal Taxable Income	\$ 109,078.46	\$ 139,538.91	\$ 172,076.21	\$ 207,382.63	\$ 284,918.32	
0.15	50,000	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	
0.25	75,000	\$ 6,250.00	\$ 6,250.00	\$ 6,250.00	\$ 6,250.00	\$ 6,250.00	
0.34	100,000	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	
0.39	335,000	\$ 3,540.60	\$ 15,420.17	\$ 28,109.72	\$ 41,879.23	\$ 72,118.14	
0.34	10,000,000	\$	\$	\$	\$	\$	

Goodman Water Co
Projection of Adjustments to Achieve 9% OVERALL returns
Schedule - C

	1	2	3	4	5
	<u>Dec-10</u>	<u>Dec-11</u>	<u>Dec-12</u>	<u>Dec-13</u>	<u>Dec-14</u>
Revenue	558,900	598,500	640,800	686,700	787,500
Total Cost Before Inc. Taxes	475,765	487,012	499,027	512,063	540,693
Income Taxes	11,715	20,539	30,189	32,479	37,508
Total Cost**	487,480	507,551	529,216	544,542	578,201
Operating Income	71,420	90,949	111,584	142,158	209,299
Net Rate Base*	1,234,698	1,322,181	1,328,146	1,336,099	1,739,712
Total Customers	621	665	712	763	875
Revenue per Customer	900.00	900.00	900.00	900.00	900.00
Return on Rate Base	5.8%	6.9%	8.4%	10.6%	12.0%
Σ of Returns	625,410				
Average Annual Return	9.0%				

* Plant and Equipment supports 825 customers
 ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below

			<u>Fixed</u>	<u>Variable</u>
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00	
	Purchase Water			
Variable	Purchased Power	\$ 27,066.00		\$ 27,066.00
	Chemicals			
Variable	Repairs and Maintenance	\$ 7,746.00		\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00		\$ 14,855.00
Variable	Outside Services	\$ 102,925.00		\$ 102,925.00
Variable	Water Testing	\$ 2,783.00		\$ 2,783.00
	Rents			
	Transportation Expenses			
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00	
	Insurance - Health and Life			
Fixed	Regulatory Commission Expense - Rate Case	\$ 20,000.00	\$ 20,000.00	
Variable	Miscellaneous Expense	\$ 378.00		\$ 378.00
Fixed	Depreciation Expense	\$ 228,853.00	\$ 228,853.00	
Variable	Taxes Other Than Income	\$ 2,988.00		\$ 2,988.00
Fixed	Property Taxes	\$ 18,502.00	\$ 18,502.00	
	Sub Total	\$ 475,765.00	\$ 317,024.00	\$ 158,741.00
			\$ 0.67	\$ 0.33
direct Calc	Income Tax - Marginal rate at	\$ 11,714.98	\$ 11,714.98	
	Total Expenses before Interest	\$ 487,479.98	\$ 634,048.67	\$ 329,197.31
			66.6%	33.4%

Tax Calc's											
	Revenue	\$	558,900.00	\$	598,500.00	\$	640,800.00	\$	686,700.00	\$	787,500.00
	Operating Expenses	\$	475,765.00	\$	487,012.35	\$	499,026.56	\$	512,063.26	\$	540,692.88
	Synchronized Interest	\$	27,835.00	\$	27,835.00	\$	27,835.00	\$	27,835.00	\$	27,835.00
	Arizona Taxable Income	\$	55,300.00	\$	83,652.65	\$	113,938.44	\$	146,801.74	\$	218,972.12
	Arizona State Income Tax Rate		6.9680%		6.9680%		6.9680%		6.9680%		6.9680%
	Arizona Income Tax	\$	3,853.30	\$	5,828.92	\$	7,939.23	\$	10,229.14	\$	15,257.98
	Federal Taxable Income	\$	51,446.70	\$	77,823.73	\$	105,999.21	\$	136,572.59	\$	203,714.14
0.15		\$	50,000	\$	7,500.00	\$	7,500.00	\$	7,500.00	\$	7,500.00
0.25		\$	75,000	\$	361.67	\$	6,250.00	\$	6,250.00	\$	6,250.00
0.34		\$	100,000	\$	-	\$	960.07	\$	8,500.00	\$	8,500.00
0.39		\$	335,000	\$	-	\$	-	\$	-	\$	-
0.34		\$	10,000,000	\$	-	\$	-	\$	-	\$	-



Product and Service Information

SAS/ETS Software

Time Series Analysis

Regression with Autocorrelated and Heteroscedastic Errors

In regression analysis, if the error terms are not independent (*autocorrelated*), the efficiency of the ordinary least-square (OLS) parameter estimates is adversely affected and the standard error estimates are biased. This happens frequently with time series data.

Ordinary regression analysis assumes that the error variance is the same for all observations. When the error variance is not constant, the data are said to be *heteroscedastic*, and ordinary least-squares estimates are inefficient.

The AUTOREG procedure estimates and forecasts linear regression models for time series data when the errors are autocorrelated or heteroscedastic. The autoregressive error model is used to correct for autocorrelation, and the generalized autoregressive conditional heteroscedasticity (GARCH) model and its variants are used to model and correct for heteroscedasticity.

The AUTOREG procedure supports the following variations of the GARCH model:

- generalized ARCH (GARCH)
- exponential GARCH (EGARCH)
- integrated GARCH (IGARCH)
- GARCH-in-mean (GARCH-M)

The procedure can also analyze models that combine autoregressive errors and GARCH-type heteroscedasticity. The maximum likelihood method is used for GARCH models and for mixed AR-GARCH models. Four estimation methods are supported for the autoregressive error model:

- Yule-Walker
- unconditional least squares
- iterated Yule-Walker
- exact maximum likelihood

Details of the [AUTOREG](#) Procedure

ARIMA (Box-Jenkins) and ARIMAX (Box-Tiao) Modeling and Forecasting

The ARIMA procedure analyzes and forecasts equally spaced univariate time series data, transfer function data, and intervention data using the autoregressive moving-average (ARMA) model or the more general autoregressive integrated moving-average (ARIMA) model. An ARIMA model predicts a value in a response time series as a linear combination of its own past values, past errors, and current and past values of other time series.

The ARIMA procedure provides a comprehensive set of tools for univariate time series model identification, parameter estimation, and forecasting. It offers great flexibility in the kinds of ARIMA or ARIMAX models that can be analyzed. The procedure supports seasonal, subset, and factored ARIMA models; intervention or interrupted time series models; multiple regression analysis with ARIMA errors; and transfer function models of any complexity.

Details of the [ARIMA](#) Procedure

Polynomial Distributed Lag Regression

The PDLREG procedure estimates regression models for time series data in which the effects of some of the regressor variables are distributed across time. The distributed lag model assumes that the effect of an independent variable, X , on a dependent variable, Y , is distributed over time. If the value of X at time t changes, Y experiences some immediate effect at time t , and it also experiences delayed effects at times $t + 1$, $t + 2$, and so on up to time $t + p$, for some limit p .

The distribution of the lagged effects is modeled by Almon lag polynomials. The coefficients of the lagged values of the regressor are assumed to lie on a polynomial curve.

Regression models supported by PROC PDLREG can include any number of regressors with distribution lags and any number of covariates (simple regressors without lag distributions).

You can specify a minimum degree and a maximum degree for the lag distribution polynomial, and the procedure fits polynomials for all degrees in the specified range.

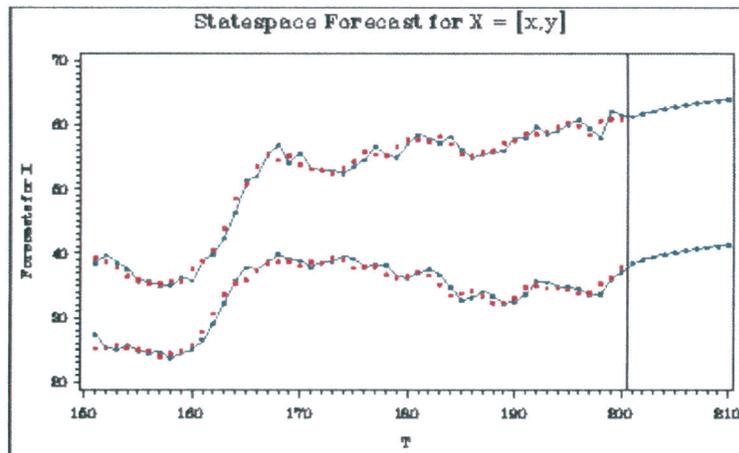
The PDLREG procedure can also test for autocorrelated residuals and perform autocorrelated error correction using the autoregressive error model. You can specify any order autoregressive error model and several different estimation methods for the autoregressive model, including exact maximum likelihood.

Details of the [PDLREG Procedure](#)

State Space Modeling and Forecasting

The STATESPACE procedure is useful for automatic modeling and forecasting of several interrelated time series with or without a feedback relationship.

The procedure analyzes and forecasts multivariate time series using the state space model. It is appropriate for jointly forecasting several related time series that have dynamic interactions. By taking into account the autocorrelations among the whole set of variables, the STATESPACE procedure may give better forecasts than methods that model each series separately. By default, the STATESPACE procedure automatically selects a state space model appropriate for the time series, making the procedure a good tool for automatic forecasting of multivariate time series.



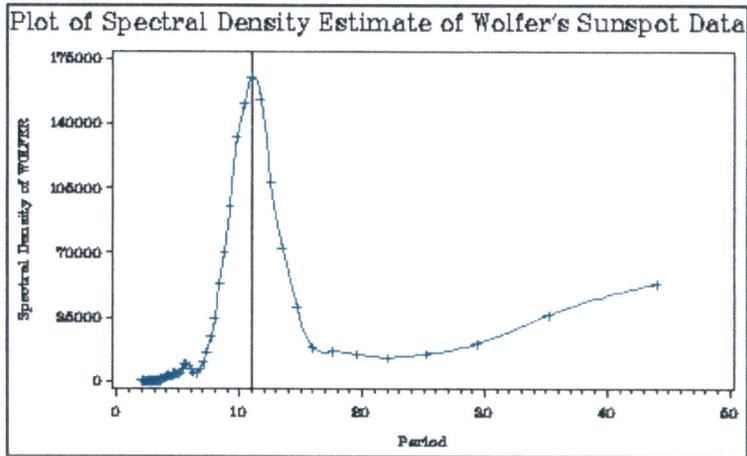
Use the STATESPACE procedure to forecast and fit statespace models.

Details of the [STATESPACE Procedure](#)

Spectral Analysis

Spectral analysis is a statistical approach to detecting regular cyclical patterns, or periodicities, in transformed time series data.

The SPECTRA procedure produces estimates of the spectral and cross-spectral densities of a multivariate time series. Estimates of the spectral and cross-spectral densities of a multivariate time series are produced using a finite Fourier transform to obtain periodograms and cross-periodograms. The periodogram ordinates are smoothed by a moving average to produce estimated spectral and cross-spectral densities. PROC SPECTRA can also test whether the data are white noise.



The SPECTRA procedure performs spectral and cross-spectral analysis of time series.

Details of the [SPECTRA](#) Procedure

Time Series Cross-Sectional Regression Analysis

The TSCSREG procedure analyzes a class of linear econometric models that commonly arise when time series and cross-sectional data are combined. The TSCSREG procedure analyzes panel data sets that consist of multiple time series observations on each of several individuals or cross-sectional units. The performance of any estimation procedure for the model regression parameters depends on the statistical characteristics of the error components in the model. The TSCSREG procedure estimates the regression parameters in the preceding model under several common error structures, including one and two-way fixed and random effects.

Details of the [TSCSREG](#) Procedure

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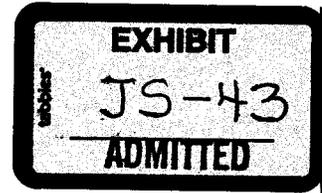
Surrebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

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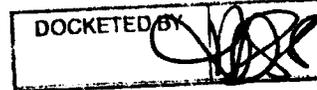
BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

Arizona Corporation Commission
DOCKETED

JUN 13 2011



Notice of Filing

James Schoemperlen, an Intervenor, hereby provides notice of filing Surrebuttal testimony in the above referenced matter.

Respectfully Submitted this 13th day of June, 2011.

James Schoemperlen
Intervenor

Surrebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

1 An Original and Thirteen Copies
2 Of the foregoing filed this 13th day
3 Of June, 2011 with:
4
5 Docket Control
6 Arizona Corporation Commission
7 1200 West Washington
8 Phoenix, Arizona 85007
9
10 Copies of the foregoing hand delivered/
11 Mailed this 13th day of June, 2011 to:
12
13 Jane L. Rodda
14 Administrative Law Judge
15 Hearing Division
16 Arizona Corporation Commission
17
18 Janice Alward, Chief Counsel
19 Legal Division
20 Arizona Corporation Commission
21
22 Ayesha Vohra
23 Legal Division
24 Arizona Corporation Commission
25
26 Steven M. Olea, Director
27 Utilities Division
28 Arizona Corporation Commission
29
30
31
32

Surrebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

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Surrebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

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AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

SURREBUTTAL TESTIMONY OF

JAMES SCHOEMPERLEN

**IN RESPONSE TO REBUTTAL TESTIMONY FROM MR THOMAS J. BOURASSA ON
BEHALF OF GOODMAN WATER COMPANY**

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)

DATED June 13th, 2011

June 13, 2011

LISTING OF SCHEDULES

Schedule – A Intervenor Projection of Actual Returns Based on Staff Adjustments

Schedule – B Intervenor Projection to get 9% average Returns Based on Staff Adjustments

Schedule – C Intervenor Projection of Actual Returns Based on 7.17% Beginning Cost of Capital after Staff Adjustments

Schedule – D Intervenor Projection of Average 7.17% Returns Based on Staff Adjustments

Schedule – E GWC Projection of Actual Returns Based on Staff Adjustments, 10% starting Cost of Capital

Schedule – F GWC Projection of Actual Returns Based on Staff Adjustments - Ave 10%

Schedule – G GWC Returns required to get 9% average return on investment

Schedule – H ACC Projection of Actual Returns Based on Staff Adjustments

Schedule – I ACC Projection of Actual Returns Based on Staff Adjustments and 9% Average Return

Schedule – J RUCO Projection of Actual Returns Based on RUCO Adjustments and 7.85% cost of Capital

Schedule – K RUCO Projection of Actual Returns Based on Average 7.85% Return

Schedule – L Recalculation of Return on Equity Requirement

Schedule – M Recalculation of Rate Base

Schedule – N Goodman Water Company Capacity Unused

Surrebuttal Testimony of James Schoemperlen
Goodman Water Company
Docket No. W-02500A-10-0382

Schedule – O Overall Summary

**Schedule – P P15, American Water Works Association Manual of Water
Supply Practices, Growth in Number of Customers**

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Q1. Please state your name, occupation and address.

A1. James Schoemperlen, Corporate Controller for Sargent Aerospace in Tucson, my home address is 39696 S. Horse Run Drive.

Q2. On whose behalf are you testifying?

A2. I am testifying on behalf of myself as an intervenor in this case.

Q3. Please describe your educational background and professional experience.

A3. I am a Certified Public Accountant; I am the Corporate Controller for Sargent in Tucson which is an Aerospace Company. I have a BBA in Accounting from the University of Wisconsin. I have a Master's of Science Management from the University of Wisconsin with concentration in Finance.

Q4. Briefly Summarize your work experience.

A4. Brief summary as follows:

As Corporate Controller for Sargent in Tucson I have prepared numerous analysis for large capital additions including a recent significant expansion for the Tucson operations and I have led our mergers and acquisitions efforts analyzing numerous potential targets , Prior to that I was a divisional controller for Walbro Engine Management in Tucson, Prior to that I was controller for Lear Corporation in Janesville Wisconsin where I participated in a major plant expansion using robotics and was successful in obtaining significant funding from the state of Wisconsin for that expansion, Prior to that I held various Controllershship positions with Motorola in Chicago IL for 20 years and performed the analysis for major plant expansions both domestic and international , Prior to that I worked as an Auditor for KPMG, one of the largest audit firms in the world and had concentrated audit experience in both commercial manufacturing and health care.

Q5. What is the scope of your testimony here?

30 A5. I am testifying in opposition to positions taken by Mr. Bourassa in his
31 rebuttal testimony on May 2, 2011 on behalf of Goodman Water Company
32 (GWC).

33 Q6. Please summarize the areas where you have problems with positions
34 taken by the Arizona Corporation Commission staff.

35 A6. I will respond mainly to each of his comments where he indicated he had
36 problems with my previous testimony using his question and answer
37 numbers although my silence on issues he has raised with the testimony of
38 others should not be construed as agreement with his position. In some
39 cases I will respond to issues he has raised with the testimony of others.

40
41 **Q16/A16**

42 Mr. Bourassa talks about Staff's reliance on the NARUC audit guidelines.
43 Hear it is clear we are talking about an affiliate transferring land to GWC.
44 On line 15, Mr. Bourassa states "Further, the Guidelines also state that the
45 transfer of assets from an affiliate to the utility should be at the lower of
46 prevailing market price or net book value, except as required by law or
47 regulation. Mr. Bourassa states "In that regard the commission rules
48 require that assets be recorded at the cost to the person (or company) first
49 devoting the asset to public service. And, the cost is the cost at the time the
50 asset is devoted to public service. He goes on to say, "It was the Company
51 who first to (sic) devoted the land to public service and the cost to GWC is
52 the cost it incurred to acquire the land from E.C. Development.

53
54 None of this indicates what "Commission rules for Affiliate Transactions"
55 are. The NARUC Guidelines for affiliate transactions should be used. This
56 means GWC needs to initially record the asset at the lower of E.C.
57 Developments "Book Value" or the prevailing market price at the time of
58 the transaction. The key phrase here is **WHICHEVER IS LOWER**. This then
59 becomes GWC's cost and would be their cost at the time it is devoted to
60 public service (i.e. the cost doesn't change, they are not allowed to increase
61 "Cost" due to appraisal at the time it is devoted to public service. GWC

62 needs to give us the book value on their affiliates books (EC Development)
63 at the time of transfer so that the appropriate rate for the land can be
64 developed.

65
66 **Q24/A24**

67
68 Mr. Bourassa is answering the question "ON WHAT BASIS DO YOU
69 CONCLUDE THAT THE CONSTRUCTION OF 340,000 GALLONS OF STORAGE
70 CAPACITY AT WATER PLANT NO.3 WAS REASONABLE AND PRUDENT?"

71
72 Page 9, Line 18 "The Company was required to make the decision in the
73 2006-2007 time frame, at which time the Company obviously could not
74 have known exactly how many customers it would have in 2009.

75
76 In GWC's response to the Wawrzyniak/Schoemperlen second set of data
77 requests question 2.15 where the following question was asked:

78
79 **Q. Please provide a copy of all financial analysis Goodman Water**
80 **Company performed for construction of additions to Goodman**
81 **water plan, equipment and infrastructure.**

82
83 Mr. Shiner's response was as follows:

84
85 **A. The Company has not prepared any "financial analysis" for**
86 **construction of additions to Goodman Water Company water plant**
87 **other than schedules for the costs of plan additions, depreciation**
88 **schedules, and sources of funding which have been provided.**

89
90 Mr. Shiner already admitted he did not do any analysis before expansion.
91 **How can this be prudent?**

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Q25/A25

In this question/answer, Mr. Bourassa goes on to say “I do not disagree with Mr. Scott that the Company is projected to have approximately 875 customers by 2014 based upon data from 2004 to 2010. In that regard, Staff’s historical practice is to evaluate a utility’s capacity requirements using a five year planning horizon as measured from the end of the test period.”

This is interesting since GWC has never prepared a five year analysis of the data with projections they indicate they believe in. I admit that this is extremely important, especially with a water system and customer base which is undergoing an expansion. I will put forward this type of analysis later and show that it presents some very important conclusions.

Mr. Bourassa goes on to indicate “Labeling storage capacity as “excess” implies the Company acted imprudently, which it did not. Using data from 2009 and 2010, and arguably 2008, is an after-the-fact analysis, or a form of “Monday morning quarterbacking.”

I think there is a clear question regarding the “quarterbacking” that was done. As stated before, **GWC HAS ADMITTED THAT NO FINANCIAL ANALYSIS WAS PERFORMED PRIOR TO EXPANSION.** As I stated on page 21 under item g., in my original testimony the following:

“As indicated by various articles in Folder-B (i.e. Wall Street Journal etc.), the housing bubble had burst in 2006.”

I think there is plenty of evidence here that GWC has acted imprudently in expansion of the waterworks.

Q26/A26

125 Mr. Bourassa asks and answers, "IS PLANT FOUND TO BE PRUDENTLY
126 CONSTRUCTED ALSO USED AND USEFUL? Yes. It has been the policy of this
127 Commission that plant investment found to be prudent is also deemed to
128 be used and useful."

129
130 The corollary here is if construction is not prudent, it should not be found
131 used and useful. Clearly had GWC preformed financial analysis and properly
132 examined the evidence of the housing bubble bursting available in 2006, a
133 prudent decision would have been not to expand. GWC was imprudent in
134 **not even performing the analysis as they admit.**

135
136 The next question is, given that there clearly is imprudent expansion, how
137 do we determine what portion of the investment is imprudent? How do
138 other businesses do it? Companies who are not regulated monopolies size
139 their assets to service the market appropriately and charge their customers
140 a market (or fair) rate accordingly. In the Airline industry they do not put a
141 Boeing 777-300 with a capacity of 550 passengers on flights between
142 Tucson and Phoenix. No they put jets similar to the Canada Regional Jet 200
143 with 50 seats. Obviously customers flying between Tucson and Phoenix
144 would be in the range of 50 passengers and these passengers would not be
145 willing to subsidize the cost of flying a 777-300. Is the 777-300 used and
146 useful if it was there, well it would be functional but it would not be used
147 and useful because customers have a choice (something not available in a
148 monopoly). They will only pay a fair fare! Likewise, it would be
149 inappropriate to consider something used and useful just because it is
150 connected to the system for a water company. There should be similar
151 questions for the water company to make sure the customers of a
152 monopoly pay a fair fare! The most logical way to do this is evaluate
153 capacity and percentage of capacity used. I will present analysis later that
154 does just that.

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Q33/A33

Mr. Bourassa asks and answers, “WHY DOES RUCO CONCLUDE THERE IS EXCESS CAPACITY? RUCO believe the Company over-anticipated GWC’s build-out date and constructed plant to serve the projected build out. However, Mr. Coley’s analysis is an after-the-fact analysis”. I would conclude that RUCO is correct and note that what led to the problem is that GWC did no “BEFORE-THE-FACT analysis **and that’s how they had acted imprudently!** As indicated previously, there was ample evidence in the market that it was imprudent to expand as early as 2006.

Q35/A35

Mr. Bourassa asks and answers in part “...Doesn’t the construction of utility plant typically require significant lead times....Yes, ... the utility would have to start planning, engineering and permitting the new storage tank 1-2 years before the storage capacity is needed.”

Again, there was sufficient evidence in the market that the housing bubble was bursting as early as 2006 and again, GWC admits they did no analysis.

Q47-48/A47-48

Mr. Bourassa correctly indicates that I did not split costs appropriately for AIAC and the phases. Previously I did not have the information necessary to do the split out and I thank Mr. Bourassa for providing that information. I have corrected that in the information presented below and in all the schedules attached.

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Calculation of Returns based on Mr. Bourassa corrections for AIAC

Schedule – A summary, Actual Average Return at 9% on Rate base (see actual complete Schedule A attached for complete details.

(Note that Summary Schedules show results only. For detail, go to Schedules)

Schedule A summary information summarized below is this intervenors calculation of the 5 year returns based on beginning customers of 621 and ending with customers of 875 as projected by ACC staff and agreed to by Mr. Bourassa as indicated previously. As indicated earlier, GWC through Mr. Bourassa indicates that it is proper to forecast forward expected customers and this intervenor agrees.

Other major assumptions include:

- To calculate excess capacity, I have used the detail in schedule N, Goodman Water Company Capacity Used (there was a small correction in the calculation which moved unused capacity of plant added in phase IV, V, Future Phase and Unplanned Capacity to down to 85% from 85.8%). It should be noted that I now am allowing a 10% deduction for reserve capacity in the calculations per Mr. Bourassa’s objection in Q46/A46.
- I used Schedule M for the Excess Capacity adjustments pursuant to additional information received from Mr. Bourassa. See Schedule M for detail. It should be noted that in Schedule A, I am adjusting both the Rate Base excess capacity and related depreciation for additional capacity required as users are added back in to get to the 875 users at the end of 2014.

- 219 ● Growth in customers over the rate period are assumed to be
220 linear.
- 221 ● In my calculations later, I use RUCO's method of calculating the
222 Equity Return Requirement since it gets around the biased
223 results achieved with the GWC analysis and with the exception
224 that I average the returns and add 50 bps to come up with an
225 Equity return requirement of 8.02%, which is a full 194 bps
226 above yield on a Baa/BBB-rated utility bond. As indicated by
227 recent fall stock market trends and the flagging housing
228 market, it appears that recovery and meaningful increases in
229 employment may be a long time in coming, this is a very
230 generous return. I also use the 40% debt equity split and
231 available WIFA rates for debt to come up with an overall return
232 requirement of 7.17%. **Below I use overall capital rate of 9%**
233 **however to show what happens if we use ACC Staff overall**
234 **calculation of cost of Capital and based the starting return on**
235 **9%**. See detail on Schedule – L.
- 236 ● Same assumptions as ACC staff for Property Taxes, Wages
237 (which I still think are too high), Purchased Power, Repairs and
238 Maintenance, Office Supplies and Outside consulting.
- 239 ● I have not added in the additional \$40k in expense that GWC
240 feels they are incurring in defense of this case. I feel that
241 adjustment is arbitrary and unsupported.

242 Results and conclusions:

Goodman Water Co
Intervenor Projection of Actual Returns Based on Staff Adjustments

Required Rate Decrease Calculated

2.42%

Schedule - A

Actual Average Return at 9% on Rate Base

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	562,506	602,362	644,935	691,131	792,581
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	443,955	466,305	492,010	520,473	582,978
Net Operating Income - After Taxes (Before Interest)	118,552	136,057	152,924	170,658	209,603
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875
Average Revenue per Customer	905.81	905.81	905.81	905.81	905.81
Return on Rate Base	9.0%	10.0%	10.7%	11.0%	11.8%
Σ of Returns	787,794				
Average Annual Return	10.6%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150

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Conclusions:

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1. The calculations show that if we **start with** a 9% return on the adjusted rate base, the **average** return to GWC over the rate period will balloon to **11.8% (Clearly a return not intended)** and at that rate a **decrease** in revenue from base revenue in test year would be required of **2.42%**.

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Schedule – B summary, Intervenor Projection to get 9% average Returns Based on Staff Adjustments

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Schedule B summary information summarized below shows what happens to the rates as compared to current rates if we adjust the returns to get a 9% **average return** over the projection period. **What we clearly should be talking about is average returns and not returns in year one due to the effects of addition of customers over the rate period. As we can see, there are significant inequities (i.e. GWC earns a 10.6% return in schedule a above and**

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257 **not the 9% return intended) if we do not focus on average return over the**
 258 **rate period.** (Other assumptions the same as above.)

Goodman Water Co
 Intervenor Projection to get 9% average Returns Based on Staff Adjustments
 Required Rate **Decrease Calculated** **8%**

Schedule - B

Initial Return to get 9% Average	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	532,362	570,082	610,374	654,094	750,108
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	436,204	455,241	477,855	504,454	564,608
Net Operating Income - After Taxes (Before Interest	96,158	114,841	132,519	149,641	185,501
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875
Average Revenue per Customer	857.27	857.27	857.27	857.27	857.27
Return on Rate Base	7.3%	8.5%	9.2%	9.6%	10.4%
Σ of Returns	678,659				
Average Annual Return	9%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150

259
 260 **Conclusions:**

- 261 1. **If we focus on making sure the 9% return is the average return over the projection return and**
 262 **not the starting return,** based on my assumptions above this leads to a **8% decline** in current
 263 rates.

264 ***Schedule – C summary, Intervenor Projection of Actual Returns Based on***
 265 ***7.17% Beginning Cost of Capital after Staff Adjustments***

266 Schedule C summary information summarized below shows what happens to the
 267 revenue rates required as compared to current rates if we adjust the returns to
 268 get a 7.17% starting return (My calculation of return required). All other
 269 assumptions are the same as examples above.

Goodman Water Co

Intervenor Projection of Actual Returns Based on 7.17% Beginning Cost of Capital after Staff Adjustments

Required Rate Decrease Calculated

8%

Schedule - C

Average Return at 7.17% with adjusted rate base

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	530,197	567,763	607,891	651,434	747,057
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	435,751	454,541	476,896	503,303	563,288
Net Operating Income - After Taxes (Before Interest)	94,446	113,223	130,995	148,131	183,769
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875
Average Revenue per Customer	853.78	853.78	853.78	853.78	853.78
Return on Rate Base	7.17%	8.4%	9.1%	9.5%	10.4%
Σ of Returns	670,563				
Average Annual Return	9.02%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150

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Conclusions:

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1. My required return on rate base requires a 8% decrease in rates and generates an average return for GWC of 9.02% over the period.

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Schedule – summary, Intervenor Projection of Average 7.17% Returns Based on Staff Adjustments

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Schedule D summary information summarized below shows that if we are trying to achieve a 7.17% average return based on my calculations of required returns we would actually need a 13% decrease in current rates.

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Goodman Water Co
Intervenor Projection of Average 7.17% Returns Based on Staff Adjustments

Required Rate Decrease Calculated

14%

Schedule - D

Average Return at 7.17% with adjusted rate base

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	498,047	533,335	571,030	611,932	701,757
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	429,024	446,604	465,383	487,930	543,695
Net Operating Income - After Taxes (Before Interest)	69,023	86,731	105,647	124,002	158,062
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875
Average Revenue per Customer	802.01	802.01	802.01	802.01	802.01
Return on Rate Base	5.24%	6.4%	7.4%	8.0%	8.9%
Σ of Returns	543,466				
Average Annual Return	7.31%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150

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Conclusions:

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1. My required return on rate base requires a 14% decrease in rates and generates an average return for GWC of 7.17% over the period.

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Schedule – E summary, Shows what happens if GWC gets their request of 10% return on an unadjusted rate base of \$2,402,221 over the build out period.

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Goodman Water Co

GWC Projection of Actual Returns Based on Staff Adjustments, 10% starting Cost of Capital

Required Rate Increase Calculated

49%

Schedule - E

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	857,176	917,910	982,785	1,053,181	1,207,776
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	626,700	659,231	691,677	726,883	804,200
Net Operating Income - After Taxes (Before Interest)	230,476	258,678	291,108	326,297	403,576
Net Rate Base*	2,402,221	2,402,221	2,402,221	2,402,221	2,402,221
RATE BASE PER GWC					
0.10 Total Customers	621	665	712	763	875
Average Revenue per Customer	1,380.32	1,380.32	1,380.32	1,380.32	1,380.32
Return on Rate Base	10%	10.8%	12.1%	13.6%	16.8%
Σ of Returns	1,510,136				
Average Annual Return	13%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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289 **Conclusions:**

- 290 1. Return over the period assuming no rate base reductions (clearly there are some) would be 13%
 291 and require a revenue increase of 49%. Ending return of 16.8% which would continue into future
 292 years assuming no rate change review and no further customer growth. Clearly there would be
 293 future customer growth. **THESE ARE RETURNS THAT ARE UNJUSTLY HIGH AND**
 294 **UNREASONABLE.**

295 ***Schedule – F summary, Shows what happens if GWC gets their request of 10%***
 296 ***AVERAGE return on an unadjusted rate base of \$2,298,376 over the build out***
 297 ***period.***

Goodman Water Co

GWC Projection of Actual Returns Based on Staff Adjustments - Ave 10%

Required Rate Increase Calculated

33%

Schedule - F

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	768,522	822,974	881,140	944,255	1,082,861
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	588,355	618,313	650,313	684,838	755,982
Net Operating Income - After Taxes (Before Interest)	180,167	204,662	230,827	259,417	326,879
Net Rate Base*	2,402,221	2,402,221	2,402,221	2,402,221	2,402,221
RATE BASE PER GWC					
Total Customers	621	665	712	763	875
Average Revenue per Customer	1,237.56	1,237.56	1,237.56	1,237.56	1,237.56
Return on Rate Base	7.5%	8.5%	9.6%	10.8%	13.6%
Σ of Returns	1,201,951				
Average Annual Return	10.0%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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Conclusions:

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- To get an average return of 10%, we would need to start with a return of 7.5%. The average return on the unadjusted rate base of 10% would require a 31% increase in revenue AND THEY WOULD BE EARNING 13.6% which would continue into future years assuming no rate change review and no further customer growth. Clearly there would be future customer growth. **THESE ARE RETURNS THAT ARE UNJUSTLY HIGH AND UNREASONABLE.**

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Schedule – G summary, Shows what happens if GWC return on unadjusted rate base is limited to 9% average over the rate period. Here required rates would have to be increased by 27%.

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Goodman Water Co

GWC Returns required to get 9% average return on investment

Required Rate Increase Calculated

27%

Schedule - G

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	734,234	786,257	841,827	902,126	1,034,548
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	573,525	602,432	633,309	666,815	737,334
Net Operating Income - After Taxes (Before Interest)	160,709	183,825	208,517	235,311	297,215
Net Rate Base*	2,402,221	2,402,221	2,402,221	2,402,221	2,402,221
RATE BASE PER GWC					
Total Customers	621	665	712	763	875
Average Revenue per Customer	1,182.34	1,182.34	1,182.34	1,182.34	1,182.34
Return on Rate Base	6.7%	7.7%	8.7%	9.8%	12.4%
Σ of Returns	1,085,577				
Average Annual Return	9%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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Conclusions:

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1. To get an average return of 9%, we would need to start with a return of 6.7%. The average return on the unadjusted rate base of 9% would require a 25% increase in revenue. At the end of the period GWC would be earning at the 12.4% rate which would continue into future years assuming no rate change review and no further customer growth. Clearly there would be future customer growth. **THESE ARE RETURNS THAT ARE UNJUSTLY HIGH AND UNREASONABLE.**

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Schedule – H summary, Shows what happens if ACC return on adjusted rate base is adjusted to get the \$700,936 in revenue requested in year one. Here the average return would be 11% over the rate period and require a 22% rate increase.

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Goodman Water Co
ACC Projection of Actual Returns Based on Staff Adjustments

Required Rate Increase Calculated

22%

Schedule - H

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	700,936	750,600	803,650	861,214	987,631
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	559,123	587,010	616,797	649,120	719,223
Net Operating Income - After Taxes (Before Interest)	141,813	163,590	186,852	212,095	268,408
Net Rate Base*	1,739,712	1,739,712	1,739,712	1,739,712	1,739,712
Total Customers	621	665	712	763	875
Average Revenue per Customer	1,128.72	1,128.72	1,128.72	1,128.72	1,128.72
Return on Rate Base	8.2%	9.4%	10.7%	12.2%	15.4%
Σ of Returns	972,757				
Average Annual Return	11%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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Conclusions:

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1. Revenue request generates an average return of 11%, we would need to start with a return of 8.2% and this would generate a rate increase of 22%.

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Schedule – I summary, Shows what happens if ACC return on adjusted rate base is adjusted to get an average rate return of 9% over the period on a rate base of \$1,739,712.

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Goodman Water Co

ACC Projection of Actual Returns Based on Staff Adjustments and 9% Average Return

Required Rate Increase Calculated

10%

Schedule - J

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	636,188	681,264	729,414	781,661	896,400
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	531,805	557,021	584,689	614,712	680,644
Net Operating Income - After Taxes (Before Interest)	104,383	124,243	144,725	166,949	215,756
Net Rate Base*	1,739,712	1,739,712	1,739,712	1,739,712	1,739,712
Total Customers	621	665	712	763	875
Average Revenue per Customer	1,024.46	1,024.46	1,024.46	1,024.46	1,024.46
Return on Rate Base	6.0%	7.1%	8.3%	9.6%	12.4%
Σ of Returns	756,057				
Average Annual Return	9%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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336 **Conclusions:**

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1. Revenue request generates an average return of 9%, we would need to start with a return of 6% and this would generate a rate increase of 10%.

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Schedule – J summary, Shows what happens if RUCO return on adjusted rate base starts at 7.85% on an adjusted rate base of \$1,729,190. Here the average return is 10% over the period and would require a 6% reduction in required revenue compared to the Revenue base in the adjusted test year.

Goodman Water Co

RUCCO Projection of Actual Returns Based on RUCCO Adjustments and 7.85% cost of Capital

Required Rate Increase Calculated

-6%

Schedule - J

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	544,111	582,663	623,844	668,529	766,662
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	408,357	431,230	455,663	482,175	540,397
Net Operating Income - After Taxes (Before Interest)	135,754	151,433	168,181	186,355	226,266
Net Rate Base*	1,729,190	1,729,190	1,729,190	1,729,190	1,729,190
Total Customers	621	665	712	763	875
Average Revenue per Customer	876.19	876.19	876.19	876.19	876.19
Return on Rate Base	7.85%	8.8%	9.7%	10.8%	13.1%
Σ of Returns	867,988				
Average Annual Return	10%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

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345

346 **Conclusions:**

- 347 1. If we start with the RUCO return on Rate Base requested in year one of 7.85% on the adjusted
 348 rate base of \$1,729,190 the average return over the period is 10%. Adoption of this would
 349 require a 6% reduction in revenue as calculated for the adjusted test year.

350

351 **Schedule – K summary, Shows what happens if RUCO return on adjusted rate**
 352 **base is adjusted to get a 7.85% AVERAGE on an adjusted rate base of**
 353 **\$1,729,190. Here the average return is 7.85% over the period and would**
 354 **require a 15% reduction in required revenue compared to the Revenue base**
 355 **in the adjusted test year.**

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Goodman Water Co
RUCCO Projection of Actual Returns Based on Average 7.85% Return

Required Rate Increase Calculated

-15%

Schedule - K

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	487,650	522,201	559,109	599,157	687,107
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	385,454	405,326	427,664	452,170	505,988
Net Operating Income - After Taxes (Before Interest)	102,195	116,875	131,445	146,987	181,119
Net Rate Base*	1,729,190	1,729,190	1,729,190	1,729,190	1,729,190
Total Customers	621	665	712	763	875
Average Revenue per Customer	785.26	785.26	785.26	785.26	785.26
Return on Rate Base	5.91%	6.8%	7.6%	8.5%	10.5%
Σ of Returns	678,622				
Average Annual Return	7.85%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

357

358

359 **Conclusions:**

- 360 1. If we start with the RUCO return on Rate Base requested in year one of 5.91% on the adjusted
 361 rate base of \$1,729,190 in year one, the average return over the period is 7.85% and results in a
 362 reduction of income over adjusted test year of 15%

363

364 **Discussion of Appropriate Methods and summary conclusions:**

365 When we talk about returns, it is important to understand exactly what we mean
 366 by those returns, particularly when we are dealing with a water company that has
 367 an expanding customer base. We have already established that one of the things
 368 that must be forecasted is customer growth. This is also validated as indicated on
 369 page 15 of the American Water Works Association manual of Water Supply
 370 Practices –M1, under Growth in Customers, “Growth in the number of customers

371 served can be projected by recognizing historical growth patterns, growth
372 restrictions, and changes in economic conditions, and by being aware of proposed
373 developments in the service area". (See Schedule – P page P15 of the American
374 Water Works Association Manual of Water Supply Practices, Growth in Number of
375 Customers attached).

376 Obviously, if we are proposing a 10% return on rate base and that 10% is applied
377 to a water company with AN EXPANDING CUSTOMER BASE in year one, by the
378 end of the rate period that water company could be earning 18% with an average
379 return over the period of 13%. Is this what is intended? I think this would result in
380 Unfair and Unjust rate practices. I believe the intention is to develop reasonable
381 rates of return over the rate period. Just as GWC has forecasted all kinds of
382 expenses over the period so too do they need to forecast growth in customer
383 base. As we know, ACC Staff has provided a forecast and GWC has agreed to that
384 forecast.

385 Following is a summary of where each of the parties to this rate request stand
386 based on Average Returns over the rate period.

Goodman Water Co
 Intervenor Projection of Actual Returns Based on based on Average over the rate period
Schedule - O

Rate Requestor / Intervenor	Rate Base Year 1	Rate Base Year 5 (2014)	Starting Return on Rate Base	Ending Return on Rate Base	Average Return	Test Year Revenue Increase (Decrease) %	
1.) Goodman Water Co. @ Current Request	2,402,221	2,402,221	10%	17%	13%	49%	Rate Base Issues, Intergenerational Inequity Issues, Average Rate Issues
Intervenor Schoemperlen @ 9% Yr-1 Return	1,317,239	1,775,328	9%	12%	11%	-2%	Rate base varies to solve intergenerational rate issue. Ending rate base is above both ACC and RUCO. Average Return Issues.
2.) Goodman Water Co. @ 10% Average Return	2,402,221	2,402,221	8%	14%	10%	33%	Rate Base Issues, Intergenerational Inequity Issues.
Intervenor RUCO @ 7.85% Starting Return	1,729,190	1,729,190	8%	13%	10%	-6%	Rate base resolved, Intergenerational inequity Issues, Average Rate Issues
3.) Goodman Water Co. @ 9% Average Return	2,402,221	2,402,221	7%	12%	9%	27%	Rate Base Issues, Intergenerational inequity Issues, Average Rate Resolved
4.) Goodman Water Co. @ 9% Average Return ACC RATE BASE	1,739,712	1,739,712	7%	13%	9%	14%	Rate Base Resolved, Intergenerational inequity Issues, Average Return @9%. Return on rate base issue.
5.) ACC @ 9% Average Return	1,739,712	1,739,712	6%	12%	9%	10%	Issues, Average Return @9%. Return on rate base issue.
6.) Intervenor Schoemperlen @ 9% Average Return	1,317,239	1,775,328	7%	10%	9%	-8%	Issue. Ending rate base is above both ACC and RUCO. Average Return issue @9%. Return on rate base issue.
Intervenor RUCO @ 7.85% Average Return	1,729,190	1,729,190	6%	10%	7.85%	-15%	Rate Base Resolved, Intergenerational inequity Issues, Return on rate base resolved.
7.) Intervenor Schoemperlen @ 7.17% Average Return	1,317,239	1,775,328	5%	9%	7%	-14%	Rate base varies to solve intergenerational rate issue. Ending rate base is above both ACC and RUCO. Return at Equity Rate calculated resolved. Return on rate resolved.

RED NUMBERS GW AT THEIR REQUESTED RATE BASE

Ref#above Conclusions:

- 1.) Intervenor Schoemperlen with return on rate base set for 9% for gear one, rate base set to solve intergenerational rate issue. Rate base at end of rate period is higher than both RUCO and ACC. Average return to GWC is 11%, results in 2% reduction in test gear revenue. Average return is above 9%.
- 2.) Intervenor RUCO @7.85% Year - 1 return on on rate base shows a 6% reduction in test gear revenue. Average return to GWC would be 10% over rate period. Average return above 9%.
- 3.) GWC at ACC rate base with 9% average return would show a 14% increase in revenue requirement from Base. Intergenerational rate issue not resolved.
- 4.) ACC calculations at a 9% AVERAGE RETURN over rate period would require a 10% increase in base period revenue. Does not resolve intergenerational rate inequity issue.
- 5.) Intervenor Schoemperlen @9% Average Return over the period would result in a 8% reduction in test gear revenue
- 6.) Intervenor RUCO @7.85% Average Return results in 15% reduction in test gear revenue. Still have intergenerational rate inequity issue.
- 7.) Intervenor Schoemperlen with AVERAGE return set at required calculated return. Intergenerational rate inequity resolved.

Please note that the summary shows each of the options sorted from High to Low based on average returns. #7 above shows Intervenor Schoemperlen, achieving average return on rate base per the cost of capital calculations with a sliding rate base to get around the intergenerational rate inequity issue. This shows a downward adjustment in test year revenue of 14%. Another important calculation is #5 above which shows what happens if a 9% average return is allowed on

395 sliding rate base to resolve the intergenerational rate inequity issue. This one
396 assumes the ACC Staff debt/equity mix and cost of capital calculations and shows
397 an 8% reduction in rates from test year revenues. Also important is the Intervenor
398 RUCO #2, which shows the effect on their rate base which is similar to ACC Staff
399 rate base at their calculated cost of capital at 7.85% in year 1. Here the
400 adjustment to test year revenue is a 6% reduction. Finally, #4 ACC Staff
401 calculations at a 9% average cost of capital show an increase of 10% in Test year
402 revenue. What should be noted though is that GWC will be earning **12% at the**
403 **end of the rate period** and there is still a significant intergenerational rate
404 inequity issue.

405 One thing that should be noted is that my numbers start with a rate base that is
406 applicable to customers in year 1 and builds each year proportionally as
407 customers are added as indicated in schedules M&N.

408 **Q44/A44**

409

410 To answer Mr. Bourassa's question on unplanned capacity, if we look at
411 information on Table-2 "Adjustment for Excess Capacity" we can see that the
412 GWC lot summary information only goes up to lot 957 (lot 961 after correction for
413 GWC error in double count). As previously indicated by Mr. Mark Taylor of
414 Westland resources the water works were built out to 1,291 units (See p19 of my
415 original testimony). Since the difference between the 1,291 and the 961 units
416 (370) does not appear on the planned housing map, I can only assume it is
417 "Unplanned Capacity".

418 **Q45/A45**

419

420 Mr. Bourassa indicates that Mr. Scott finds that 50 percent of the 530,000 gallon
421 storage tank is used and useful. The corollary to that is that 50% is not used and
422 useful, I will remove all of that later in my current analysis consistent with what
423 ACC Staff has done. By way of information, Mr. Scott disallowed the 50%
424 deduction since as Mr. Shiner indicates, it was erroneously included in the

425 calculations since that upsized tank was part of the planning for ECR-West (this is
426 the new planned subdivision West of Oracle road which did not materialize (see
427 A27, line 14, page 13 of Mr. Shiners rebuttal testimony. One wonders what other
428 items GWC erroneously included in these calculations). ECR-West was designed for
429 420 residential lots and about 27 acres of commercial development. This is no
430 doubt how Mr. M. Olea, Director Utilities division and Mr. Marlin Scott, Jr.
431 concluded that the ECR water works was built out for 1,800 customers.

432

433 Mr. Bourassa is correct that my approach to excess capacity is different from that
434 of Mr. Scott. Mr. Scott assumes that if a piece of equipment is connected to the
435 system and delivering service, the entire item is considered used and useful.
436 There is no consideration given to the capacity the system was designed for and
437 the corresponding cost. Obviously, if you're going to design a system for 105
438 housing units (the total number of housing units in Phase IV-B, IV-C, Future Phase
439 and Unplanned Capacity are 741 units, 105 is the portion currently built out see
440 Table -2 Adjustment for Excess Capacity) that design is going to be a lot different
441 than something designed for 741 housing units. since 105 housing units is what
442 was connected, $105/741 = 14.2\%$ used or 85.8% unused or excess capacity. We
443 need a fair way to scale the portion of the expenditure used and useful to the
444 current rate payers. The only fair way to do that is through the proportion
445 analysis I have used. If we don't do this, there will be significant intergenerational
446 rate inequity (i.e. current users paying for future users capacity requirements).

447

448 **Q46/A46**

449

450 Mr. Bourassa states in part, "...Mr. Schoemperlen appears to have no
451 accommodation of reserve capacity necessary for customer growth". Mr.
452 Bourassa failed to recognize that I did not attempt to adjust for the build out
453 excess capacity between 1,800 Units and 1,291 units ($1,800-1,291=509$,
454 $509/1,800 = 28.2\%$, see appendix - A, ACC 1800 Units.Pdf attached). Where
455 elsewhere in the analysis respondents are using 10% for reserve, I have built in
456 28.2%. In the calculations I have presented above however I re-calculated to do a
457 more direct adjustment although I believe it is excessively generous to GWC.

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Other General comments on Mr. Bourassa Rebuttal

1. P213, P50 of Mr. Bourassa Cost of Capital calculation, Q68/ A68. Mr. Bourassa needs to understand that we are asking him to change his equity structure. The actual return is 9% as follows:

$$\begin{array}{r} \text{Clear} \\ 1,729,190 \times \\ 0.6 = \\ \hline 1,037,514 * \\ \\ 0 \text{ items} \\ \\ 93,378 + \\ 1,037,514 = \\ \hline 0.090001677085803 * \end{array}$$

Equity should be reduced, debt should be increased. Rate payers should not have to pay for GWC inappropriate capital structure. I am surprised that Mr. Bourassa does not understand what is going on here, these are basic finance principals.

2. P214, P51 of Mr. Bourassa. Q70 / A70 line 5. All Mr. Bourassa's adjustments indicate he hasn't properly adjusted for "Less Debt" if the calculations above get to a lower total cost of capital.
3. P217, Line 16, Q74, A74 Mr. Bourassa questions will Goodman Water have sufficient earnings to pay dividends.... In his calculations, he does not adjust the equity capital down. It would be GWC's choice if they don't want to do an equity buyback but they should operate with an efficient capital structure.
4. P225, Q85, A85. line 1, WIFA loans were not pursued. A lot of other utilities can deal with the restrictions, why can't GWC.

- 487 5. P225 Q87, A87. They don't site any credible debt proposals from other
488 companies. Debt rates were lower. Who advised company that premium of
489 150 to 200 basis points were required?
490
- 491 6. P234 Q98 A98, debt structure. As Mr. Bourassa indicated in his previous
492 testimony, the stocks in his sample had a debt / equity structure of about
493 50/50 debt vs. equity.
494
- 495 7. P236 Q100/A100, Mr. Bourassa says his calculations show that the rate is
496 confiscatory but this is because he hasn't made the debt for equity
497 adjustment suggested. Later he goes over a number of calculations where
498 he is trying to prove the same thing but again has not made the
499 adjustment.
500
- 501 8. P237 & 238 Q103/A103, Q104/A104. All of these calculations are pure
502 fiction. Mr. Bourassa should realize that he needs to reduce equity.
503
- 504 Q12 / A12, Mr. Shiner indicates all the things that need to be considered
505 but as we documented previously GWC has indicated no financial analysis
506 was done before beginning a phase. Also indicated previously, there was
507 ample evidence that the housing bubble had burst in 2006. Q22/A22 Mr.
508 Shiner indicated it was 2008 when the housing market started collapsing. As
509 I stated on page 21 under item g., in my original testimony the following:
510
- 511 **"As indicated by various articles in Folder-B (i.e. Wall Street Journal etc.),
512 the housing bubble had burst in 2006."**
513
- 514 9. Q28 A28, Mr. Shiner states that GWC originally included the cost of ECR-
515 West. One wonders what else was included that shouldn't have been?
516
- 517 10. Q44/A44, Mr. Bourassa is questioning what "Unplanned Capacity" is. To
518 answer Mr. Bourassa's question on unplanned capacity, if we look at
519 information on Schedule-N "Adjustment for Excess Capacity" we can see
520 that the GWC lot summary information only goes up to lot 957 (lot 961
521 after correction for GWC error in double count). As previously indicated by
Mr. Mark Taylor of Westland resources the water works were built out to

522 1,291 units (See p19 of my original testimony). Since the difference
523 between the 1,291 and the 961 units (370) does not appear on the planned
524 housing map, I can only assume it is "Unplanned Capacity".
525

526 11.P174, P11 of Mr. Bourassa Cost of Capital calculation.Q18/A18, Line 4. Mr.
527 Bourassa seems not to understand a weighted cost of capital approach due
528 to the debt / equity mix. Here he indicates that return on equity is 5.87%
529 while cost of capital is 8%. Again, this is only happening because he hasn't
530 adjusted to the 60% equity, 40% debt. He then describes the debt/equity
531 split as "Results Oriented". Mr. Bourassa is totally ignoring that his sample
532 stocks had a 50% split between debt and equity. We have been generous
533 here by only using a 60% / 40% split. The approach is not "Results
534 Oriented" at all.
535

536 12. Q95/A95, Mr. Bourassa questions how I arrived at the 8% cost of equity
537 capital and then answers his own question by pointing out that I used his
538 calculations (which he threw out because it was showing returns of 7% to
539 7.4% - that would be a "Results Oriented Approach"). I used his calculations
540 previously since he made no effort to include those results in calculation of
541 his cost of equity. Again, I strenuously object to the sample that Mr.
542 Bourassa has used since we have already proved that this sample
543 outperforms the entire Dow Jones U.S. Water Utility Index for the last 5
544 years (See Chart B in my original Direct Testimony). Regardless of all the
545 numerous calculations he makes and endless attempts to justify different
546 ways of performing cost of equity calculations he has a basic underlying
547 flaw that none of that can cure. That flaw is that the **SAMPLE IS BIASED**. A
548 stock sample purported to produce unbiased results cannot start with a
549 sample of stocks that out-perform the entire stock index he is trying to
550 measure. This should have been one of the first things he checked. He
551 indicates that ACC has accepted this in the past but in the past the sample
552 may have been representative of the market. We will never get rates
553 representative of the market this way. There's a good euphemism that
554 applies here, "Garbage in – Garbage out". Even Mr. Bourassa indicates in at
555 least three places in his original testimony that rates from the sample
556 selected are not good comparisons to GWC's rates (see Mr. Bourassa
557 testimony, Q6/A6 line 25-26, Q22/A22, Q29/A29).

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Enough with Mr. Bourassa's calculations and endless attempts at justification. Since he doesn't like my approach, I have tried another.

Upon review of RUCO's method of calculations and UNBIASED SELECTION OF STOCKS, I believe they have performed a good straight forward and analysis of the cost of equity capital and I agree with their analysis. For my calculations, there is no value in recreating yet another set of calculations and I therefore use RUCO's method of calculating the Equity Return Requirement since it gets around the biased results achieved with the GWC analysis and with the exception that I average the returns and add 50 bps to come up with an Equity return requirement of 8.02%, which is a full 194 bps above yield on a Baa/BBB-rated utility bond. As indicated by recent vacillating stock market trends and the flagging housing market, it appears that recovery and meaningful increases in employment may be a long time in coming, and therefore this is a very generous return. See schedule L, re-calculation of cost of Equity.

Following are the Detail Schedules of the Summaries above which contain all the calculations.

Goodman Water Co
Intervenor Projection of Actual Returns Based on Staff Adjustments
Required Rate Decrease Calculated 2.42%

Schedule - A

Actual Average Return at 9% on Rate Base

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	562,506	602,362	644,935	691,131	792,581
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	443,955	466,305	492,010	520,473	582,978
Net Operating Income - After Taxes (Before Interest)	118,552	136,057	152,924	170,658	209,603
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875 ^{14f}
Average Revenue per Customer	905.81	905.81	905.81	905.81	905.81
Return on Rate Base	9.0%	10.0%	10.7%	11.0%	11.8%
Σ of Returns	787,794				
Average Annual Return	10.0%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150
		Cost of Cap Adj. Excess Capacity			
Revised Required Operating Income	\$ 118,551.53				
Operating Expenses	\$ 244,143.00				
Taxes	\$ 15,935.27				
Depreciation	\$ 183,876.32				
Operating Revenue	\$ 562,506.12				
Operating Expenses (Before Taxes & Interest)	\$ 440,913.84	\$ 454,687.53	\$ 469,633.44	\$ 502,455.85	
Interest Expense	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78
Income Before Taxes	\$ 69,259.02	\$ 96,220.01	\$ 125,019.25	\$ 156,269.48	\$ 224,897.46
State Tax Expense	\$ 4,827.35	\$ 6,706.53	\$ 8,713.84	\$ 10,891.98	\$ 15,675.35
Pre Tax Federal Income	\$ 64,431.66	\$ 89,513.47	\$ 116,305.40	\$ 145,377.50	\$ 209,222.11
Federal Taxes	\$ 11,107.92	\$ 18,684.58	\$ 28,609.11	\$ 39,947.23	\$ 64,846.62

- Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ^{14f} Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		\$ 27,066.00
Variable	Purchased Power	\$ 27,066.00	\$ 27,066.00
Variable	Chemicals		\$ 7,746.00
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 1,215.00	\$ 1,215.00
Fixed	Rents		
Fixed	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
Fixed	Insurance - Health and Life		
Fixed	Regulatory Commission Expense - Rate Case	\$ 20,000.00	\$ 20,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 183,876.32	\$ 183,876.32
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00
Variable	Cost before Taxes	\$ 478,019.32	\$ 270,846.32
Variable	Variable/Fixed %	63.3%	36.7%
Variable	Income Taxes	\$ 15,935.27	\$ 15,935.27
	Total Expenses before Interest	\$ 443,954.59	\$ 270,846.32

Tax Calculations

Federal Taxes

15%	50000	Up to 50,000	7500
25%	25000	50,001 to 75,000	6250
34%	25000	75,001 to 100,000	8500
39%	100,001	to 335,000	91650
34%	335,001	to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co
 Intervenor Projection to get 9% average Returns Based on Staff Adjustments
 Required Rate **Decrease Calculated**

8%

Schedule - B

Initial Return to get 9% Average

	YEAR				
	1	2	3	4	5
Revenue	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Base Revenue at 621 customers per Adj Test Yr.	532,362	570,082	610,374	654,094	750,108
Total Cost**	436,204	455,241	477,855	504,454	564,608
Net Operating Income - After Taxes (Before Interest)	96,158	114,841	132,519	149,641	185,501
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875 ⁽¹⁾
Average Revenue per Customer	857.27	857.27	857.27	857.27	857.27
Return on Rate Base	7.3%	8.5%	9.2%	9.6%	10.4%
Σ of Returns	678,659				
Average Annual Return	9%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150
	Cost of Cap Adj. Excess Capacity				
Revised Required Operating Income	\$ 96,158.46				
Operating Expenses	\$ 244,143.00				
Taxes	\$ 8,184.70				
Depreciation	\$ 183,876.32				
Operating Revenue	\$ 532,362.48				
Operating Expenses (Before Taxes & Interest)	\$ 440,913.84	\$ 454,687.53	\$ 469,633.44	\$ 502,455.85	\$ 502,455.85
Interest Expense	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78	\$ 65,227.78
Income Before Taxes	\$ 39,115.38	\$ 63,940.59	\$ 90,458.42	\$ 119,233.10	\$ 182,424.54
State Tax Expense	\$ 2,726.34	\$ 4,456.66	\$ 6,304.95	\$ 8,310.55	\$ 12,714.99
Pre Tax Federal Income	\$ 36,389.04	\$ 59,483.93	\$ 84,153.47	\$ 110,922.55	\$ 169,709.55
Federal Taxes	\$ 5,458.36	\$ 9,870.98	\$ 16,862.18	\$ 26,509.79	\$ 49,436.72

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ⁽¹⁾ Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

7 10% 1,291 Total Capacity per Engineer
 578,003 Total excess capacity Rate Base remov
 26,774 Total Depreciation Removed for Excess:

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		\$ 27,066.00
Variable	Purchased Power		\$ 27,066.00
Variable	Chemicals		\$ 7,746.00
Variable	Repairs and Maintenance		\$ 14,855.00
Variable	Office Supplies and Expense		\$ 102,925.00
Variable	Outside Services		\$ 1,215.00
Variable	Water Testing		\$ 9,669.00
Variable	Rents		\$ 20,000.00
Variable	Transportation Expenses		\$ 378.00
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 378.00
Fixed	Insurance - Health and Life	\$ 9,669.00	\$ 378.00
Fixed	Regulatory Commission Expense - Rate Case	\$ 20,000.00	\$ 378.00
Variable	Miscellaneous Expense	\$ 183,876.32	\$ 2,988.00
Fixed	Depreciation Expense	\$ 183,876.32	\$ 2,988.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00
Variable	Cost before Taxes	\$ 428,019.32	\$ 270,846.32
Variable	Variable/fixed %	63.3%	36.7%
Variable	Income Taxes	\$ 8,184.70	\$ 8,184.70
Variable	Total Expenses before Interest	\$ 436,204.02	\$ 270,846.32

Tax Calculations

Federal Taxes

15%	50000	Up to 50,000	7500
25%	25000	50,001 to 75,000	6250
34%	25000	75,001 to 100,000	8500
39%	100,001	to 335,000	91650
34%	335,001	to 10,000,000	

State Tax Rate
 6.97%

Goodman Water Co
Intervenor Projection of Actual Returns Based on 7.17% Beginning Cost of Capital after Staff Adjustments
Required Rate Decrease Calculated
8%

Schedule - C

Average Return at 7.17% with adjusted rate base

	YEAR				
	1	2	3	4	5
	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>12/31/2012</u>	<u>12/31/2013</u>	<u>12/31/2014</u>
Revenue	530,197	567,763	607,891	651,434	747,057
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	435,751	454,541	476,896	503,303	563,288
Net Operating Income - After Taxes (Before Interest)	94,446	113,223	130,995	148,131	183,769
Net Rate Base*	1,317,239	1,355,198	1,433,703	1,556,205	1,775,328
Total Customers	621	665	712	763	875 ⁽¹⁾
Average Revenue per Customer	853.78	853.78	853.78	853.78	853.78
Return on Rate Base	7.17%	8.4%	9.1%	9.5%	10.4%
Σ of Returns	670,563				
Average Annual Return	9.02%				
Unused Capacity	670	626	579	528	416
Base Addition		37,958	78,505	122,502	219,124
Depreciation Addition		1,758	3,636	5,674	10,150

7.10% 1,291 Total Capacity per Engineer
 578,003 Total excess capacity Rate Base remov
 26,774 Total Depreciation Removed for Exces

Cost of Cap Adj.
Excess Capacity

Revised Required Operating Income	\$ 94,446.05
Operating Expenses	\$ 244,143.00
Taxes	\$ 7,731.57
Depreciation	\$ 183,876.32
Operating Revenue	\$ 530,196.94
Operating Expenses (Before Taxes & Interest)	\$ 440,913.84
Interest Expense	\$ 65,227.78
Income Before Taxes	\$ 36,949.84
State Tax Expense	\$ 2,575.40
Pre Tax Federal Income	\$ 34,374.44
Federal Taxes	\$ 5,156.17
	\$ 454,687.53
	\$ 469,633.44
	\$ 502,455.85
	\$ 65,227.78
	\$ 61,621.61
	\$ 87,975.55
	\$ 6,131.90
	\$ 8,125.09
	\$ 12,502.32
	\$ 81,843.66
	\$ 108,447.38
	\$ 166,870.94
	\$ 16,076.84
	\$ 25,544.44
	\$ 48,325.67

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ***Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

			<u>Fixed</u>	<u>Variable</u>
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00	
Variable	Purchase Water			\$ 27,066.00
Variable	Purchased Power	\$ 7,746.00		\$ 7,746.00
Variable	Chemicals	\$ 14,855.00		\$ 14,855.00
Variable	Repairs and Maintenance	\$ 102,925.00		\$ 102,925.00
Variable	Office Supplies and Expense	\$ 1,215.00		\$ 1,215.00
Variable	Outside Services			
Variable	Water Testing			
Variable	Rents			
Variable	Transportation Expenses			
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00	
Fixed	Insurance - Health and Life			
Fixed	Regulatory Commission Expense - Rate Case	\$ 20,000.00	\$ 20,000.00	
Variable	Miscellaneous Expense	\$ 378.00		\$ 378.00
Fixed	Depreciation Expense	\$ 183,876.32	\$ 183,876.32	
Variable	Taxes Other Than Income	\$ 2,988.00		\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00	
	Cost before Taxes	\$ 428,019.32	\$ 270,846.32	\$ 157,173.00
	Variable/Fixed %		63.3%	36.7%
Variable	Income Taxes	\$ 7,731.57		\$ 7,731.57
	Total Expenses before Interest	\$ 435,750.89	\$ 270,846.32	\$ 164,904.57

Tax Calculations

Federal Taxes

15%	50000 Up to 50,000	7500
25%	25000 50,001 to 75,000	6250
34%	25000 75,001 to 100,000	8500
39%	100,001 to 335,000	91650
34%	335,001 to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co

GWC Projection of Actual Returns Based on Staff Adjustments, 10% starting Cost of Capital

Required Rate Increase Calculated

49%

Schedule - E

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	857,176	917,910	982,785	1,053,181	1,207,776
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	626,700	659,231	691,677	726,883	804,200
Net Operating Income - After Taxes (Before Interest)	230,476	258,678	291,108	326,297	403,576
Net Rate Base*	2,402,221	2,402,221	2,402,221	2,402,221	2,402,221
RATE BASE PER GWC					
0.10 Total Customers	621	665	712	763	875 ⁽¹⁾
Average Revenue per Customer	1,380.32	1,380.32	1,380.32	1,380.32	1,380.32
Return on Rate Base	10%	10.8%	12.1%	13.6%	16.8%
Σ of Returns	1,510,136				
Average Annual Return	13%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					
Operating Expenses (Before Taxes & Interest)	\$ 507,761.00	\$ 519,049.16	\$ 531,106.97	\$ 544,190.97	\$ 572,924.48
Interest Expense	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00
Income Before Taxes	\$ 313,719.00	\$ 363,164.73	\$ 415,981.75	\$ 473,293.84	\$ 599,155.69
State Tax Expense	\$ 21,866.21	\$ 25,312.58	\$ 28,993.93	\$ 32,988.58	\$ 41,761.15
Pre Tax Federal Income	\$ 291,852.79	\$ 337,852.14	\$ 386,987.82	\$ 440,305.26	\$ 557,394.54
Federal Taxes	\$ 97,072.59	\$ 114,869.73	\$ 131,575.86	\$ 149,703.79	\$ 189,514.14

* Plant and Equipment supports 825 customers

** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below

⁽¹⁾ Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
	Purchase Water		
Variable	Purchased Power	\$ 27,642.00	\$ 27,642.00
	Chemicals		
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 2,783.00	\$ 2,783.00
	Rents		
	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
	Insurance - Health and Life		
Fixed	Regulatory Commission Expense - Rate Case	\$ 40,000.00	\$ 40,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 241,474.00	\$ 241,474.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00
	Cost before Taxes	\$ 507,761.00	\$ 348,444.00
	Variable/Fixed %		68.6%
Variable	Income Taxes	\$ 118,938.80	\$ 118,938.80
	Total Expenses before Interest	\$ 626,699.80	\$ 278,255.80

Tax Calculations

Federal Taxes

15%	50000 Up to 50,000	7500
25%	25000 50,001 to 75,000	6250
34%	25000 75,001 to 100,000	8500
39%	100,001 to 335,000	91650
34%	335,001 to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co
GWC Projection of Actual Returns Based on Staff Adjustments - Ave 10%
Required Rate Increase Calculated
33%

Schedule - F

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	768,522	822,974	881,140	944,255	1,082,861
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	588,355	618,313	650,313	684,838	755,982
Net Operating Income - After Taxes (Before Interest)	180,167	204,662	230,827	259,417	326,879
Net Rate Base*	2,402,221	2,402,221	2,402,221	2,402,221	2,402,221
RATE BASE PER GWC					
Total Customers	621	665	712	763	875 ¹⁴¹
Average Revenue per Customer	1,237.56	1,237.56	1,237.56	1,237.56	1,237.56
Return on Rate Base	7.5%	8.5%	9.6%	10.8%	13.6%
Σ of Returns	1,201,951				
Average Annual Return	10.0%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					
	Cost of Cap Adj. Excess Capacity				
Revised Required Operating Income	\$ 180,166.58				
Operating Expenses	\$ 266,287.00				
Taxes	\$ 80,594.45				
Depreciation	\$ 241,474.00				
Operating Revenue	\$ 768,522.02				
Operating Expenses (Before Taxes & Interest)	\$ 507,761.00	\$ 519,049.16	\$ 531,106.97	\$ 544,190.97	\$ 572,924.48
Interest Expense	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00	\$ 35,696.00
Income Before Taxes	\$ 225,065.02	\$ 268,229.31	\$ 314,336.61	\$ 364,367.94	\$ 474,240.67
State Tax Expense	\$ 15,687.03	\$ 18,695.58	\$ 21,909.26	\$ 25,396.45	\$ 33,054.57
Pre Tax Federal Income	\$ 209,377.99	\$ 249,533.73	\$ 292,427.35	\$ 338,971.50	\$ 441,186.10
Federal Taxes	\$ 64,907.42	\$ 80,568.15	\$ 97,296.67	\$ 115,250.31	\$ 150,003.27

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ** Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

			Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00	
	Purchase Water			
Variable	Purchased Power	\$ 27,642.00		\$ 27,642.00
	Chemicals			
Variable	Repairs and Maintenance	\$ 7,746.00		\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00		\$ 14,855.00
Variable	Outside Services	\$ 102,925.00		\$ 102,925.00
Variable	Water Testing	\$ 2,783.00		\$ 2,783.00
	Rents			
	Transportation Expenses			
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00	
	Insurance - Health and Life			
Fixed	Regulatory Commission Expense - Rate Case	\$ 40,000.00	\$ 40,000.00	
Variable	Miscellaneous Expense	\$ 378.00		\$ 378.00
Fixed	Depreciation Expense	\$ 241,474.00	\$ 241,474.00	
Variable	Taxes Other Than Income	\$ 2,988.00		\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00	
	Cost before Taxes	\$ 507,761.00	\$ 348,444.00	\$ 159,317.00
	Variable/Fixed %		68.6%	31.4%
Variable	Income Taxes	\$ 80,594.45		\$ 80,594.45
	Total Expenses before Interest	\$ 588,355.45	\$ 348,444.00	\$ 239,911.45

Tax Calculations

Federal Taxes

15%	50000 Up to 50,000	7500
25%	25000 50,001 to 75,000	6250
34%	25000 75,001 to 100,000	8500
39%	100,001 to 335,000	91650
34%	335,001 to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co
ACC Projection of Actual Returns Based on Staff Adjustments

Required Rate Increase Calculated

22%

Schedule - H

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	700,936	750,600	803,650	861,214	987,631
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	559,123	587,010	616,797	649,120	719,223
Net Operating Income - After Taxes (Before Interest)	141,813	163,590	186,852	212,095	268,408
Net Rate Base*	1,739,712	1,739,712	1,739,712	1,739,712	1,739,712
Total Customers	621	665	712	763	875 ^{1†}
Average Revenue per Customer	1,128.72	1,128.72	1,128.72	1,128.72	1,128.72
Return on Rate Base	8.2%	9.4%	10.7%	12.2%	15.4%
Σ of Returns	972,757				
Average Annual Return	11%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

1,291 Total Capacity per Engineer
 578,003 Total excess capacity Rate Base remov
 26,774 Total Depreciation Removed for Exces

Cost of Cap Adj.

Excess Capacity

Revised Required Operating Income	\$ 141,812.62
Operating Expenses	\$ 266,287.00
Taxes	\$ 51,362.32
Depreciation	\$ 241,474.00
Operating Revenue	\$ 700,935.94
Operating Expenses (Before Taxes & Interest)	\$ 507,761.00
Interest Expense	\$ 35,696.00
Income Before Taxes	\$ 157,478.94
State Tax Expense	\$ 10,976.28
Pre Tax Federal Income	\$ 146,502.66
Federal Taxes	\$ 40,386.04

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ^{1†} Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		\$ 27,642.00
Variable	Purchased Power	\$ 7,746.00	\$ 7,746.00
Variable	Chemicals	\$ 14,855.00	\$ 14,855.00
Variable	Repairs and Maintenance	\$ 102,925.00	\$ 102,925.00
Variable	Office Supplies and Expense	\$ 2,783.00	\$ 2,783.00
Variable	Outside Services		
Variable	Water Testing		
Variable	Rents		
Variable	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
Fixed	Insurance - Health and Life		
Fixed	Regulatory Commission Expense - Rate Case	\$ 40,000.00	\$ 40,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 241,474.00	\$ 241,474.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00
Variable	Cost before Taxes	\$ 507,761.00	\$ 348,444.00
Variable	Variable/Fixed %	68.6%	31.4%
Variable	Income Taxes	\$ 51,362.32	\$ 51,362.32
Variable	Total Expenses before Interest	\$ 559,123.32	\$ 348,444.00

Tax Calculations

Federal Taxes

15%	50000 Up to 50,000	7500
25%	25000 50,001 to 75,000	6250
34%	25000 75,001 to 100,000	8500
39%	100,001 to 335,000	91650
34%	335,001 to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co
ACC Projection of Actual Returns Based on Staff Adjustments and 9% Average Return
Required Rate Increase Calculated

Schedule - I

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	636,188	681,264	729,414	781,661	896,400
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	531,805	557,021	584,689	614,712	680,644
Net Operating Income - After Taxes (Before Interest)	104,383	124,243	144,725	166,949	215,756
Net Rate Base*	1,739,712	1,739,712	1,739,712	1,739,712	1,739,712
Total Customers	621	665	712	763	875 ^(1*)
Average Revenue per Customer	1,024.46	1,024.46	1,024.46	1,024.46	1,024.46
Return on Rate Base	6.0%	7.1%	8.3%	9.6%	12.4%
Σ of Returns	756,057				
Average Annual Return	9%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					

1,291 Total Capacity per Engineer
 578,003 Total excess capacity Rate Base remov
 26,774 Total Depreciation Removed for Exces

	Cost of Cap Adj	Excess Capacity
Revised Required Operating Income	\$ 104,382.72	
Operating Expenses	\$ 266,287.00	
Taxes	\$ 24,044.40	
Depreciation	\$ 241,474.00	
Operating Revenue	\$ 636,188.12	
Operating Expenses (Before Taxes & Interest)	\$ 507,761.00	\$ 519,049.16
Interest Expense	\$ 35,696.00	\$ 35,696.00
Income Before Taxes	\$ 92,731.12	\$ 126,519.09
State Tax Expense	\$ 6,463.36	\$ 8,818.38
Pre Tax Federal Income	\$ 86,267.76	\$ 117,700.71
Federal Taxes	\$ 17,581.04	\$ 29,153.28

* Plant and Equipment supports 825 customers
 ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
^(1*) Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
Variable	Purchase Water		\$ 27,642.00
Variable	Purchased Power	\$ 27,642.00	\$ 27,642.00
Variable	Chemicals		\$ 7,746.00
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 2,783.00	\$ 2,783.00
Fixed	Rents		
Fixed	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
Fixed	Insurance - Health and Life		
Fixed	Regulatory Commission Expense - Rate Case	\$ 40,000.00	\$ 40,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 241,474.00	\$ 241,474.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 17,301.00	\$ 17,301.00
Variable	Cost before Taxes	\$ 507,761.00	\$ 348,444.00
Variable	Variable/Fixed %	68.6%	31.4%
Variable	Income Taxes	\$ 24,044.40	\$ 24,044.40
	Total Expenses before Interest	\$ 531,805.40	\$ 348,444.00

Tax Calculations

Federal Taxes		
15%	50000	Up to 50,000
25%	25000	50,001 to 75,000
34%	25000	75,001 to 100,000
39%	100,001	to 335,000
34%	335,001	to 10,000,000

State Tax Rate
6.97%

Goodman Water Co
RUCCO Projection of Actual Returns Based on RUCCO Adjustments and 7.85% cost of Capital
Required Rate Increase Calculated

Schedule - J

-6%
YEAR

	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	544,111	582,663	623,844	668,529	766,662
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	408,357	431,230	455,663	482,175	540,397
Net Operating Income - After Taxes (Before Interest)	135,754	151,433	168,181	186,355	226,266
Net Rate Base*	1,729,190	1,729,190	1,729,190	1,729,190	1,729,190
Total Customers	621	665	712	763	875 ⁽¹⁾
Average Revenue per Customer	876.19	876.19	876.19	876.19	876.19
Return on Rate Base	7.85%	8.8%	9.7%	10.8%	13.1%
Σ of Returns	867,988				
Average Annual Return	10%				
Unused Capacity	670	626	579	528	416

1,291 Total Capacity per Engineer
578,003 Total excess capacity Rate Base remov
26,774 Total Depreciation Removed for Exces

	Cost of Cap Adj.	Excess Capacity
Revised Required Operating Income	\$ 135,753.52	
Operating Expenses	\$ 237,105.00	
Taxes	\$ 41,651.47	
Depreciation	\$ 129,601.00	
Operating Revenue	\$ 544,110.99	
Operating Expenses (Before Taxes & Interest)	\$ 366,706.00	\$ 377,628.70
Interest Expense	\$ 42,378.00	\$ 42,378.00
Income Before Taxes	\$ 135,026.99	\$ 162,656.43
State Tax Expense	\$ 9,411.38	\$ 11,337.15
Pre Tax Federal Income	\$ 125,615.61	\$ 151,319.28
Federal Taxes	\$ 32,240.09	\$ 42,264.52

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ⁽¹⁾ Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

		Fixed	Variable
Fixed	Salaries and Wages	\$ 35,014.00	\$ 35,014.00
Variable	Purchase Water		\$ 27,066.00
Variable	Purchased Power		\$ 7,746.00
Variable	Chemicals		\$ 14,855.00
Variable	Repairs and Maintenance		\$ 100,284.00
Variable	Office Supplies and Expense		\$ 1,215.00
Variable	Outside Services		\$ 9,669.00
Variable	Water Testing		\$ 20,000.00
Variable	Rents		\$ 378.00
Variable	Transportation Expenses		\$ 129,601.00
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
Fixed	Insurance - Health and Life	\$ 20,000.00	\$ 20,000.00
Fixed	Regulatory Commission Expense - Rate Case	\$ 378.00	\$ 378.00
Variable	Miscellaneous Expense	\$ 2,615.00	\$ 2,615.00
Fixed	Depreciation Expense	\$ 18,263.00	\$ 18,263.00
Variable	Taxes Other Than Income	\$ 366,706.00	\$ 212,547.00
Fixed	Property Taxes	\$ 18,263.00	\$ 154,159.00
Variable	Cost before Taxes		
Variable/Fixed %		58.0%	42.0%
Variable	Income Taxes	\$ 41,651.47	\$ 41,651.47
	Total Expenses before Interest	\$ 408,357.47	\$ 195,810.47

Tax Calculations

Federal Taxes

15%	50000	Up to 50,000	7500
25%	25000	50,001 to 75,000	6,250
34%	25000	75,001 to 100,000	8500
39%		100,001 to 335,000	91650
34%		335,001 to 10,000,000	

State Tax Rate

6.97%

Goodman Water Co
RUCCO Projection of Actual Returns Based on Average 7.85% Return
Required Rate Increase Calculated -15%

Schedule - K

	YEAR				
	1	2	3	4	5
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Revenue	487,650	522,201	559,109	599,157	687,107
Base Revenue at 621 customers per Adj Test Yr.	576,464				
Total Cost**	385,454	405,326	427,664	452,170	505,988
Net Operating Income - After Taxes (Before Interest)	102,195	116,875	131,445	146,987	181,119
Net Rate Base*	1,729,190	1,729,190	1,729,190	1,729,190	1,729,190
Total Customers	621	665	712	763	875 ⁽¹⁾
Average Revenue per Customer	785.26	785.26	785.26	785.26	785.26
Return on Rate Base	5.91%	6.8%	7.6%	8.5%	10.5%
Σ of Returns	678,622				
Average Annual Return	7.85%				
Unused Capacity	670	626	579	528	416
Base Addition					
Depreciation Addition					
	Cost of Cap Adj. Excess Capacity				
Revised Required Operating Income	\$ 102,195.13				
Operating Expenses	\$ 237,105.00				
Taxes	\$ 18,748.39				
Depreciation	\$ 129,601.00				
Operating Revenue	\$ 487,649.52				
Operating Expenses (Before Taxes & Interest)	\$ 366,706.00	\$ 377,628.70	\$ 389,296.13	\$ 401,956.53	\$ 429,759.76
Interest Expense	\$ 42,378.00	\$ 42,378.00	\$ 42,378.00	\$ 42,378.00	\$ 42,378.00
Income Before Taxes	\$ 78,565.52	\$ 102,194.48	\$ 127,434.50	\$ 154,822.61	\$ 214,969.05
State Tax Expense	\$ 5,476.02	\$ 7,122.96	\$ 8,882.18	\$ 10,791.14	\$ 14,983.34
Pre Tax Federal Income	\$ 73,089.51	\$ 95,071.53	\$ 118,552.32	\$ 144,031.48	\$ 199,985.71
Federal Taxes	\$ 13,272.38	\$ 20,574.32	\$ 29,485.40	\$ 39,422.28	\$ 61,244.43

1,291 Total Capacity per Engineer
578,003 Total excess capacity Rate Base removed
26,774 Total Depreciation Removed for Excess C

- * Plant and Equipment supports 825 customers
- ** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below
- ⁽¹⁾ Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

			<u>Fixed</u>	<u>Variable</u>
Fixed	Salaries and Wages	\$ 35,014.00	\$ 35,014.00	
	Purchase Water			
Variable	Purchased Power	\$ 27,066.00		\$ 27,066.00
	Chemicals			
Variable	Repairs and Maintenance	\$ 7,746.00		\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00		\$ 14,855.00
Variable	Outside Services	\$ 100,284.00		\$ 100,284.00
Variable	Water Testing	\$ 1,215.00		\$ 1,215.00
	Rents			
	Transportation Expenses			
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00	
	Insurance - Health and Life			
Fixed	Regulatory Commission Expense - Rate Case	\$ 20,000.00	\$ 20,000.00	
Variable	Miscellaneous Expense	\$ 378.00		\$ 378.00
Fixed	Depreciation Expense	\$ 129,601.00	\$ 129,601.00	
Variable	Taxes Other Than Income	\$ 2,615.00		\$ 2,615.00
Fixed	Property Taxes	\$ 18,263.00	\$ 18,263.00	
	Cost before Taxes	\$ 366,706.00	\$ 212,547.00	\$ 154,159.00
	Variable/Fixed %		58.0%	42.0%
Variable	Income Taxes	\$ 18,748.39		\$ 18,748.39
	Total Expenses before Interest	\$ 385,454.39	\$ 212,547.00	\$ 172,907.39

Tax Calculations

Federal Taxes

15%	50000 Up to 50,000	7500
25%	25000 50,001 to 75,000	6250
34%	25000 75,001 to 100,000	8500
39%	100,001 to 335,000	91650
34%	335,001 to 10,000,000	

State Tax Rate

6.97%

Intervenors
Recalculation of Return on Equity Requirement
(As of GWC Intervenor Surrebuttal Date)
Schedule - L

Calculation of the Cost of Equity

Method	Results ⁽¹⁾		
	Low	High	Average
DCF (Water Sample)	9.09%	9.31%	9.09%
DCF (Natural Gas Sample)	9.31%	9.31%	9.31%
CAPM (Water Sample)	5.35%	6.64%	6.00%
CAPM (Natural Gas)	5.10%	6.29%	5.70%
Total			7.52%
Company Specific Risk Premium			0.50%
Total Company Equity Return Requirement			8.02%

⁽¹⁾ Results from RUCO rate calculations

Goodman Water Company
Required Return

	Interest Rate	Current Equity	Proportion	Requested Return	Adjusted Proportion	Interest Rate	Adjusted Equity	Interest
Long Term Debt, 1st Issue	8.50%	\$ 507,451.00	18.32%	1.56%	18.32%	8.50%	\$ 507,451.00	\$ 43,133.34
Long Term Debt, 2nd Issue			0.00%		21.68%	3.68%	\$ 600,392.48	\$ 22,094.44
Common Equity	11.00%	\$ 2,261,887.00	81.68%	8.98%	60.00%	8.02%	\$ 1,661,602.80	
		\$ 2,769,338.00		10.54%	100.00%		\$ 2,769,446.28	\$ 65,227.78
								(b)
Current Rate Base		\$ 2,397,419.00	(d)					
Proposed required income		\$ 252,687.96	= (a) X (d)					
Proposed required revenue		\$ 2,865,453.45						

(a)

(b)

Adjusted Rate Base	\$ 1,895,242.36	(e)
Less Unused Phase IVB, IVC, V, Future Planned, Unplanned	\$ 578,003.18	
Net Adjusted Rate Base	\$ 1,317,239.17	(f)

Intervenor
Recalculation of Rate Base
(As of GWC Intervenor Surrebuttal Data)
Schedule - M

132676.6

Calculation of Adjusted Rate Base

	Phase	Year	Acct	Description	Cost	AIAAC	% AIAAC	Total 2008 Land Additions	Land After Staff Adjustment	Phase IV, V Apportionment	Phase IV, V Depreciation Adjustment	Calculation of Depreciation Adjustment	Depr. Rate
Bourassa Calculated Fair Value Rate Base (Sched A-1, P-1)	IV	2008	303	Land and Land Rights	\$165,000		0.00%	\$484,159	\$124,659	\$41,624	\$0.00	\$0.00	0.00%
Staff Adjustment for GWC "Error" in including ECR-West Capacity ⁽¹⁾	IV	2008	304	Structure & Improv.	\$171,506		0.06%			\$171,506	\$5,711.15	\$5,711.15	3.33%
Staff Adjustment for GWC Non-Arms Length Purchase of Land	IV	2007	330	Dist. Reserv. & Standpipe	\$470,080		0.06%			\$470,080	\$10,435.78	\$10,435.78	2.22%
Sub-Total	IV	2008	331	Trans. and Dist. Mains	\$685,094	\$685,094	100.00%			\$72,350	\$1,606.17	\$1,606.17	2.00%
Excess Capacity Adjustment (Phase IVB, IVC, V, Future Planned, Unplanned) ⁽²⁾	IV	2008	333	Services	\$143,352	\$143,352	100.00%			\$43,205	\$864.12	\$864.12	2.00%
Net Fair Value Rate Base ⁽¹⁾	V	2009	331	Trans. and Dist. Mains	\$174,756	\$174,756	100.00%			\$97,051	\$3,495.12	\$3,495.12	2.00%
	V	2009	333	Services	\$35,352	\$35,352	100.00%			\$97,051	\$3,495.12	\$3,495.12	2.00%
	V	2009	335	Hydrants	\$2,057,747	\$1,178,810	57.34%			\$755,560	\$707.04	\$707.04	2.00%
				Total	\$2,057,747	\$1,178,810	57.34%	\$484,159	\$124,659	\$755,560	\$44,526.68	\$44,526.68	2.00%

Per Previous Excess Capacity Calc

\$1,765,546.93 \$1,011,418.98 \$754,127.95 Bourassa Adjustment

Notes

⁽¹⁾ (85.0% (Prior Unused Capacity) x 90% (Gives 10% for growth) x Phase IV, V Apportionment) i.e. 858 x 90%

⁽²⁾ See Goodman Water Company Unused analysis

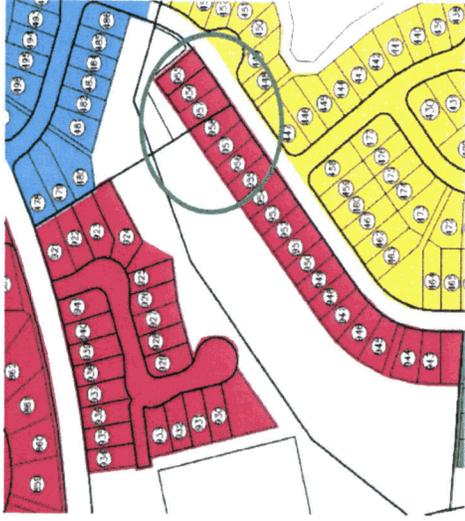
⁽³⁾ (ECR West Capacity per Shiner / total capacity times cost of tank) = 190000/5310000 x 370,098, since I adjust rest of excess capacity below)

Explain better what you're doing here

Intervenor Analysis
Schedule N
Goodman Water Company Capacity Unused
(As of 2/20/22)

	Phase	Date of Approval	Lots Included			Total Lots	Lots/Capacity Used	% Cap. Used	Unused Capacity
			Lot Start	Lot End	Sub Tot				
I	May-02		1	218		218	100.0%	0.0%	
II	June-03		219	377		159	100.0%	0.0%	
III	April-04		378	477		100	100.0%	0.0%	
IV-A	5/2/07 Certification of Approval of Construction, 1/22/07 delivery of service		478	590		113	84.1%	15.9%	
	SUBTOTAL					590	96.9%	3.1%	
Plant Added	IV-B	5/2/07 Certification of Approval of Construction, 3/22/07 delivery of service	591	617		27	88.9%	11.1%	
Plant Added	IV-C - Enclave		618	718		101	56.4%	43.6%	
Plant Added	V	March-08	719	920		202	31.9%	88.1%	
Plant Added	Future Phase		921	961		41	0.0%	100.0%	
Plant Added	Unplanned Capacity		930			330	0.0%	100.0%	
	Subtotal, Phase IVB, IV-C, V, Future and Unplanned Capacity					701	15.0%	85.0%	
	Subtotal, Phase IV (Enclave only), V, Future and Unplanned Capacity					674	12.0%	88.0%	

Total Capacity per Engineer **1291**



**Goodman Water Co
Intervenor Projection of Actual Returns Based on Average over the rate period
Schedule - O**

Rate Requestor / Intervenor	Rate Base Year 1	Rate Base Year 5 (2014)	Starting Return on Rate Base	Ending Return on Rate Base	Average Return	Test Year Revenue Increase (Decrease) %
1.) Goodman Water Co. @ Current Request	2,402,221	2,402,221	10%	17%	13%	49%
Intervenor Schoemperlen @ 9% Yr-1 Return	1,317,239	1,775,328	9%	12%	11%	-2%
Goodman Water Co. @ 10% Average Return	2,402,221	2,402,221	8%	14%	10%	33%
Intervenor RUCCO at 7.85% Starting Return	1,729,190	1,729,190	8%	13%	10%	-6%
Goodman Water Co. @ 9% Average Return	2,402,221	2,402,221	7%	12%	9%	27%
Goodman Water Co. @ 9% Average Return ACC RATE BASE	1,739,712	1,739,712	7%	13%	9%	14%
ACC @ 9% Average Return	1,739,712	1,739,712	6%	12%	9%	10%
Intervenor Schoemperlen @ 9% Average Return	1,317,239	1,775,328	7%	10%	9%	-8%
Intervenor RUCCO at 7.85% Average Return	1,729,190	1,729,190	6%	10%	7.85%	-15%
Intervenor Schoemperlen @ 7.17% Average Return	1,317,239	1,775,328	5%	9%	7%	-14%

RED NUMBERS GWC AT THEIR REQUESTED RATE BASE

Ref# above Conclusions:

- Intervenor Schoemperlen with return on rate base set for 9% for year one, rate base set to solve intergenerational rate issue. Rate base at end of rate period is higher than both RUCO and ACC. **Average return to GWC is 11%, results in 2% reduction in test year revenue. Average return is above 9%.**
- Intervenor RUCO @ 7.85% Year - 1 return on on rate base shows a 6% reduction in test year revenue. Average return to GWC would be 10% over rate period. **Average return above 9%, not resolved.**
- GWC at ACC rate base with 9% average return would show a 14% increase in revenue requirement from Base. **Intergenerational rate issue not resolved.**
- ACC calculations at a 9% AVERAGE RETURN over rate period would require a 10% increase in base period revenue. **Does not resolve intergenerational rate inequity issue.**
- Intervenor Schoemperlen @ 9% Average Return over the period would result in a 8% reduction in test year revenue
- Intervenor RUCO @ 7.85% Average Return results in 15% reduction in test year revenue. **Still have intergenerational rate inequity issue.**
- Intervenor Schoemperlen with AVERAGE return set at required calculated return. Intergenerational rate inequity resolved.

The amount and detail of needed data vary, depending on the local situation. The most accurate projections result from separately summarizing and analyzing billing data for each customer classification. For metered accounts, the utility may need to compile the number of bills rendered by customer class and meter size, and the water sales by rate block. This compilation usually includes adjustments for credits, additional billings, partial bills, final bills, and changes in the number of customers served. The compilation should include a verification procedure, such as a comparison with billed revenues. The verification procedure also should include a check on the days billed. A change in the billing cycle or in the makeup of the billing routes could result in test-year billings for more or less than 365 days. To properly analyze a bill, the utility must have billings for 365 days.

Flat-rate revenues and fire-service revenues can be annualized by establishing the average number of billing units for each rate level during the historical base year. Growth projections can be added if applicable.

In many situations, particularly for smaller utilities, detailed billing data are not available. In such cases, the utility must estimate a satisfactory basis for projection of anticipated revenues.

Projection Considerations

Reasonable projections of each revenue category listed in Table 2-1 must be considered and made as appropriate. As previously noted, it is often necessary to normalize or adjust historical data to reflect abnormal conditions that may have caused unusual variations. Some of the most common areas for adjustment are discussed below. For a more detailed discussion of revenue forecasting methodologies and issues, the reader should consult the publication *Forecasting Urban Water Demand* (AWWA 1996) or other texts on this subject.

Growth in number of customers. Growth in the number of customers served can be projected by recognizing historical growth patterns, growth restrictions, and changes in economic conditions, and by being aware of proposed developments in the service area. Historical customer class average water use and/or revenues per customer normally are adequate to project revenues in growth situations. However, if the current rates have not been in effect for a sufficient period to establish a valid average revenue per customer, historical average revenues need to be adjusted to reflect rate changes. Also, it often is necessary to perform special analyses of projected future revenues from existing or new industrial or other large-use customers.

The number of customers served at any particular point in time, such as historical year end, needs to be annualized so that projections ultimately can reflect a full year's service. Often the trend in average of beginning and end of year number of customers of record provides a satisfactory method of projection. A factor that would require adjustments includes the effects of past annexation of new customers, an occurrence not likely to be repeated with regularity. Another factor that would necessitate an adjustment would be the effects of a major area-wide economic downturn or upturn that is not typical of a long-term trend.

Non-recurring sales. Sales not expected to continue in the future should be eliminated from projections. This would include a large water user going off the system, abnormally high sales caused by an incorrect meter reading if not credited during the base year, leakage of customers' plumbing, and temporary purchases. Sufficient data must be accumulated to calculate the volume of non-recurring sales and appropriate adjustment made to revenue projections.

ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

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BOB STUMP
COMMISSIONER
SANDRA D. KENNEDY
COMMISSIONER
PAUL NEWMAN
COMMISSIONER
BRENDA BURNS
COMMISSIONER

IN THE MATTER OF THE APPLICATION OF
GOODMAN WATER COMPANY, AN
ARIZONA CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR VALUE OF
ITS UTILITY PLANT AND PROPERTY AND
(ii) AN INCREASE IN ITS WATER RATES
AND CHARGES FOR UTILITY SERVICE
BASED THEREON.

Docket No. W-02500A-10-0382

EXHIBIT
JS-44
ADMITTED

NOTICE OF ERRATA

James Schoemperlen, an Intervenor, hereby files this Notice of Errata in the above-referenced matter. Attached is page schedule A, 2 which was inadvertently left out of the Surrebuttal Testimony of James Schoemperlen, which was filed on June 13, 2010.

RESPECTFULLY SUBMITTED this 21st day of June, 2011.


James Schoemperlen
Intervenor

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AN ORIGINAL AND THIRTEEN COPIES
of the foregoing filed this 21st day
of June, 2011 with:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

COPIES of the foregoing hand delivered/
mailed this 21st day of June, 2011 to:

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Arizona Corporation Commission

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10 By 
11 James Schoemperlen
12 Intervenor

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Actual Water Plant # 3 Costs of Construction

No.	Cost Item	Actual Costs for 600,000 gallon (nominal) tank
1	Site Work	\$ 34,325.00
2	5000 gallon hydro tank	\$ 30,000.00
3	Air Compressor	\$ 7,500.00
4	Site Piping, fittings and valves	\$ 60,950.00
5	New 1,200 gpm booster station incl. valves, flow meter	\$ 101,000.00
6	New Electrical Equipment and Controls	\$ 138,000.00
7	Masonry Block Wall	\$ 81,000.00
8	Storage Shed	\$ 4,000.00
9	Rip rap in groud per plans	\$ 58,500.00
10	14' Access Gate	\$ 7,900.00
11	Access Road	\$ 5,800.00
12	Construction Water	\$ 2,500.00
13	340,000 (usable) storage tank	\$ 285,500.00
14	Taxes (est. 4.3% of subtotal from actual invoice)	\$ 35,031.07
15	Subtotal WP3 Costs	\$ 851,606.07
16	Upsize Storage tank to 590,000 gallons (usable)	\$ 72,350.00
17	Total Actual WP#3 Hard Costs	\$ 923,956

SUMMARY

Total Actual WP#3 Hard Costs	\$ 923,956
Total Conceptual Phased Construction Costs	\$ 1,434,463
Dollar Amount Difference	\$ 510,507
Percent Difference	55%

Assumptions:

1. Original 600,000 gallon storage tank costs used to develop this conceptual estimate
2. Storage tank costs estimate based on 5% cost increase from previous phase
3. All pumping and electrical constructed for build out as part of Phase 1 Construction
5. Actual Construction Costs obtained from Smyth Steel Construction Invoice Dated 01/28/08 for WP# 3
6. Does not include existing Water Plant # 3 land costs
7. Does not include Actual Soft Costs and Conceptual Phase 1 Soft Cost as they would approximately balance each other

Conceptual Water Plant # 3 Costs of Phased Construction

No.	Cost Item	Phase 1 (200,000 nominal gallon tank)	Phase 2 (200,000 nominal gallon tank)	Phase 3 (200,000 nominal gallon tank)
1	Site Work	\$ 51,750	\$ 10,000	\$ 10,000
2	5000 gallon hydro tank	\$ 30,000	\$ -	\$ -
3	Air Compressor	\$ 7,500	\$ -	\$ -
4	Site Piping, fittings and valves	\$ 60,950	\$ 10,000	\$ 10,000
5	New 1,200 gpm booster station incl. valves, flow meter	\$ 101,000	\$ -	\$ -
6	New Electrical Equipment and Controls	\$ 138,000	\$ 8,000	\$ 8,000
7	Masonry Block Wall	\$ 102,335	\$ -	\$ -
8	Storage Shed	\$ 4,000	\$ -	\$ -
9	Rip rap in groud per plans	\$ 88,214	\$ -	\$ -
10	14' Access Gate	\$ 15,000	\$ -	\$ -
11	Access Road	\$ 5,800	\$ -	\$ -
12	Construction Water	\$ 3,770	\$ 1,500	\$ 1,500
13	200,000 (nominal) storage tank	\$ 186,000	\$ 196,000	\$ 206,000
14	Estimated Taxes	\$ 34,156	\$ 9,697	\$ 10,117
15	Additional Engineering, permitting and const. mgmt	\$ -	\$ 32,928	\$ 34,368
16	Mobilization/Demobilization Costs	\$ -	\$ 11,760	\$ 12,281
17	Additional Cost of Lot 605	\$ -	\$ -	\$ -
17	Total Actual WP#3 Hard Costs	\$ 862,283	\$ 279,884	\$ 292,236
				\$ 1,434,463



BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

**DIRECT TESTIMONY IN SUPPORT OF
SETTLEMENT AGREEMENT
from**

JAMES SCHOEMPERLEN

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)

October 4, 2011

TABLE OF CONTENTS

I.	INTRODUCTION, QUALIFICATIONS AND PURPOSE.....	1
II.	SUMMARY OF REASONS FOR SUPPORT OF SETTLEMENT.....	13
III.	APPENDIX A (FORECAST OF SETTLEMENT RESULTS)	34

I. INTRODUCTION, QUALIFICATIONS AND PURPOSE

Q1. PLEASE STATE YOUR NAME AND ADDRESS.

A1. My name is James M. Schoemperlen. My home address is 39695 South Horse Run Dr. Tucson, AZ 85739

Q2. DO YOU LIVE IN THE EAGLE CREST RANCH SUBDIVISION?

A2. Yes

Q3. WHAT IS YOUR PROFESSION, BACKGROUND AND EDUCATION?

A3. I am a Certified Public Accountant; I am the Corporate Controller for Sargent in Tucson which is an Aerospace Company. I have a BBA in Accounting from the University of Wisconsin. I have a Master's of Science Management from the University of Wisconsin with concentration in Finance.

Q4. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A4. The purpose of this testimony is to support the settlement agreement between Goodman Water Company, the Residential Utility Consumer Office (RUCO) and intervenors Larry Wawrzyniak and James Schoemperlen.

Q5. PLEASE TELL US WHY YOU ARE SUPPORTING THIS AGREEMENT.

A5. Goodman Water Company (GWC), to its credit, realized the degree of resentment within the community concerning the proposed rate increase and on August 19th, approached RUCO and the Intervenors with a settlement proposal and after some negotiation agreement was reached. In my opinion this agreement is fair to all and I believe it has the potential to

usher in a new era of co-operation between the community and GWC. As part of the negotiation process, all parties came to realize that it is in the interest of all to work together to develop the community. As example of what might be possible if GWC achieves its goal of 875 customers, forecasted by the ACC staff, by the end of the rate period, I have included a forecast in Appendix – A. These calculations show a 9.3% average return over the rate period based on the recent \$2,077,253 rate base calculated by ACC staff. It is important to understand that this is only one forecast and other outcomes are certainly possible but the important point is that as the community grows, differences between the GWC position and that of the community tend to naturally disappear and therefore the importance of cooperation in development is underscored.

II. SUMMARY OF SCHEDULES

a. Appendix – A, forecast of outcome of settlement

APPENDIX – A

YEAR				
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GWC Ave Return at Settlement Agreement and ACC Rate Base and Forecast Growth

	1	2	3	4	5	Increase on Base	
	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	Yr-1	Yr-2
Revenue	594,459	715,763	806,906	906,917	1,031,927	Yr-2	5.80%
Total Cost**	519,590	584,511	637,793	696,260	768,956	Yr-3	5.80%
Net Operating Income - After Taxes (Before Interest)	74,869	131,252	169,113	210,657	262,972		
ACC Net Rate Base*	2,077,253	2,077,253	2,077,253	2,077,253	2,077,253		
RATE BASE PER GWC							
0.04 Total Customers	621	670	718	769	875 ^(a)	7.10%	1,546 Total Capacity per Engineer
Average Revenue per Customer	957.26	1,068.30	1,123.82	1,179.35	1,179.35		
Average Rate per Month	79.77	89.03	93.65	98.28	98.28		
Return on Rate Base	4%	6.3%	8.1%	10.1%	12.7%		
Return Requested	7.2%						
Σ of Annualized Returns	773,993						
Average Annualized Return		9.3%					

Operating Expenses (Before Taxes & Interest)	\$ 509,509.00	\$ 542,018.90	\$ 566,445.46	\$ 593,248.68	\$ 626,751.95
Interest Expense	\$ 36,774.00	\$ 36,774.00	\$ 36,774.00	\$ 36,774.00	\$ 36,774.00
Income Before Taxes	\$ 48,176.00	\$ 136,970.19	\$ 203,686.36	\$ 276,893.92	\$ 368,401.27
State Tax Expense	\$ 3,357.87	\$ 9,546.82	\$ 14,196.94	\$ 19,299.51	\$ 25,677.57
Pre Tax Federal Income	\$ 44,818.13	\$ 127,423.37	\$ 189,489.42	\$ 257,594.42	\$ 342,723.70
Federal Taxes	\$ 6,722.72	\$ 32,945.11	\$ 57,150.87	\$ 83,711.82	\$ 116,526.06

Q Since we are interested in the annualized effects of the rate increase (i.e. only the effect of rate increase granted), first year was annualized at requested rate.

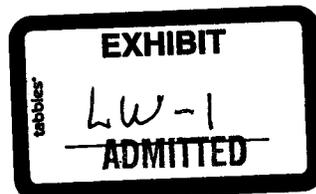
* Plant and Equipment supports 825 customers

** Assume total cost per GWC Test Year Adjust w/ adjust for reasonable Prop tax and Wages, Fixed / Variable per below

^(a) Required Compound Growth Rate in Customers to get from 621 to 872 by 2014

Ties to Bourassa Rejoinder Schedule C-1

		Fixed	Variable
Fixed	Salaries and Wages	\$ 40,000.00	\$ 40,000.00
	Purchase Water		
Variable	Purchased Power	\$ 27,642.00	\$ 27,642.00
	Chemicals		
Variable	Repairs and Maintenance	\$ 7,746.00	\$ 7,746.00
Variable	Office Supplies and Expense	\$ 14,855.00	\$ 14,855.00
Variable	Outside Services	\$ 102,925.00	\$ 102,925.00
Variable	Water Testing	\$ 2,783.00	\$ 2,783.00
	Rents		
	Transportation Expenses		
Fixed	Insurance - General Liability	\$ 9,669.00	\$ 9,669.00
	Insurance - Health and Life		
Fixed	Regulatory Commission Expense - Rate Case	\$ 40,000.00	\$ 40,000.00
Variable	Miscellaneous Expense	\$ 378.00	\$ 378.00
Fixed	Depreciation Expense	\$ 241,474.00	\$ 241,474.00
Variable	Taxes Other Than Income	\$ 2,988.00	\$ 2,988.00
Fixed	Property Taxes	\$ 19,049.00	\$ 19,049.00
	Cost before Taxes	\$ 509,509.00	\$ 350,192.00
	Variable/Fixed %	68.7%	31.3%
Variable	Income Taxes	\$ 10,080.59	\$ 10,080.59
	Total Expenses before Interest	\$ 519,589.59	\$ 169,397.59



BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

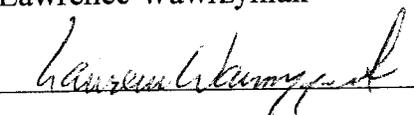
- GARY PIERCE, Chairman
- BOB STUMP
- SANDRA D. KENNEDY
- PAUL NEWMAN
- BRENDA BURNS

IN THE MATTER OF THE APPLICATION OF)
GOODMAN WATER COMPANY, AN ARIZONA)
CORPORATION, FOR (i) A DETERMINATION)
OF THE FAIR VALUE OF ITS UTILITY PLANT)
AND PROPERTY AND (ii) AN INCREASE IN)
ITS WATER RATES AND CHARGES FOR)
UTILITY SERVICE BASED THEREON.)

DOCKET NO: W-02500A-10-0382
NOTICE OF SUBMITTAL OF DIRECT
TESTIMONY BY AN INTERVENOR

By means of this filing, Lawrence Wawrzyniak hereby is submitting copies of direct testimony in opposition to the proposed increase in Goodman Water Company's water rates.

RESPECTFULLY SUBMITTED this 21st day of March, 2011.

Lawrence Wawrzyniak


39485 S. Mountain Shadow Dr.
Tucson, AZ 85739
Phone: (520) 825-6672
E-mail: LWawrzyniak05@comcast.net

ORIGINAL and Thirteen (13) copies of the foregoing to be filed the 21st day of March 2011 with Docket Control.

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

1 A copy of the foregoing Notice will
2 be emailed or mailed this same date:

3
4 Jane L. Rodda, Administrative Law Judge
5 Hearing Division
6 Arizona Corporation Commission
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8 Tucson, AZ 85701

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18 Arizona Corporation Commission
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**DIRECT TESTIMONY OF
LAWRENCE WAWRZYNIAK**

(EXCESS CAPACITY AND LOCAL WATER RATES)

March 21, 2011

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A.28 Los Cerros Water Company, Inc. Water Rates

A.29 Oro Valley Water Utility Water Rates

1 **I. INTRODUCTION, QUALIFICATIONS AND PURPOSE**

2 **Q1. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A1. My name is Lawrence Wawrzyniak. My home address is 39485 S. Mountain
4 Shadow Dr., Tucson, AZ 85739.

5
6 **Q2. PLEASE INDICATE ANY UNIQUE QUALIFICATIONS.**

7 A2. I have been a member of the Eagle Crest Ranch Homeowners Advisory Committee
8 (HEAC) since 2006 and serving as HEAC Chairman in 2008 and 2009. I am
9 currently as Chairman of the Landscape and Maintenance Committee. The HEAC
10 advises the Declarant controlled HOA Board.

11
12 **Q3. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

13 A3. I reside in the Eagle Crest Ranch Sub-Division (ECRS) and as a customer of
14 Goodman Water Company (GWC) represent myself as a ratepayer. I will testify
15 against the water rate increase.

16
17 **II. OVERVIEW OF INTERVENOR'S TESTIMONY**

18 **Q4. WHAT ARE THE ISSUES AS YOU PERCEIVE THEM?**

19 A4. I see two issues:

- 20 1. GWC took a business risk to build infrastructure to support Phase V-A, V-B and
21 IV-C homes and expansion to be built outside of the ECRS which resulted in excess
22 capacity to serve the current homeowners of Eagle Crest Ranch. Home Building
23 Phases I, II A-B, III-A-B, and IV-A-B (total of 718 lots or 75% of ECRS lots) were
24 approved for service by the Arizona Department of Environmental Quality (ADEQ)
25 using existing water plant infrastructure in place since the last rate review set forth
26 in ACC Docket No. W-02500A-06-0281 Decision No 69404. GWC also wants us
27 to pay for support of future development of Commercial property (332 EDU) within
28 ECRS by calculating storage capacity based on 2,000 gpm commercial fire flow vs.
29 1000 gpm residential fire flow rates. The ACC has stated that the GWC system has
30 a capacity to support 1,800 homes. (See ACC Document 116091, as A1 attached).
31 ECRS has a platted capacity of 891, a potential 17 non-platted lot in Phase IV-A, 10

1 non-platted lots in Phase V-A and one lot number 487 not shown on the Plat Maps
2 along with an additional 38 non-platted lots in Phase 6 for a total of 957 lots and
3 88.9 acres of Commercial property in Tracks A-F and N. (See ECRS Lot Display
4 Map, as A2 attached). The fact that the market has stalled and Goodman was left
5 with overbuilt infrastructure should not result in the current rate payers having to
6 support it or pay for depreciation on excess capacity. It amounts to a financial
7 bailout.

- 8
- 9 2. The increase in water rates will significantly increase the disparity of water rates for
10 homeowners and their surrounding neighboring communities which affect home
11 resale values. GWC is the highest cost water service in Pinal County for company's
12 with 500-1000 customers according to a 2009 Water Infrastructure Finance
13 Authority of Arizona (WIFA) Report Exhibit E, Page 28. (See WIFA Report pages
14 15-22, 25, 28, 30 as A3 attached).

15

16 **Q5. WHAT WAS THE HISTORY OF THE PHASED DEVELOPMENT OF**
17 **EAGLE CREST RANCH SUBDIVISION?**

- 18 A5. Goodman Ranch Associates, ECRS's initial developer obtained Plat Approval on
19 10/24/2000, shown as Tracks A-N. See Final Plat Eagle Crest Ranch Tracks A
20 through N, as A4 attached) I have also attached a Lot display map of ECRS. (See
21 Eagle Crest Ranch Lot Display, as A2 attached. note: the lot summary incorrectly
22 shows a count of 45 extra 45 ft .lots in Phase IV-B)

23

24 Correspondingly, GWC also looked to build the water plant in Phases. They filed a
25 plan with the Arizona Corporation Commission on December 20, 2001 under
26 Docket W-2500A-02-0435.

27

28 D. R. Horton Homes obtained Final Plat Approval from Pinal County on 12/18/01
29 as the Owner of Phase I Lots 1-218. (See A5 attached). Building of homes began
30 and 24 homes were occupied by year end 2002 followed by 105 homes in 2003, 75
31 homes in 2004, 7 homes in 2005, 5 homes in 2006 and 2 homes in 2007. The 2006

1 and 2007 sales were either models or vacant lots near the models. (See Eagle Crest
2 Ranch Phase I lots, as A6 attached).

3
4 GWC supplied water for the Phase I homes utilizing Water Plant 1 and Well# 1 and
5 received an Approval of Construction on 5/20/02 in ADEQ File No. 20010142.

6
7 Building continued with Phase II as recorded in the Final Plat for ECRS Phase II
8 Lots 219-377 approved by Pinal County 6/23/03 (See Final Plat for Eagle Crest
9 Ranch Phase II, as A7 attached). In Phase II, 61 homes were occupied in 2004
10 followed by 87 homes in 2005, 6 homes in 2006 and one model sold in 2008. D. R.
11 Horton Homes continues to maintain three models and a Sales Parking Lot in Phase
12 II today. (See Eagle Crest Ranch Phase II lots, as A8 attached).

13
14 GWC built Well #2 as a second source backup for water after the first 218 lots were
15 built in Phase I and received an Approval of Construction on 9/30/05 in ADEQ File
16 No. 20030362

17
18 The Final Plat for ECRS Phase III was approved on 6/2/04 for Lots 378-477. (See
19 Final Plat for Eagle Crest Ranch Phase III, as A9 attached). This Phase was split
20 into two sections. Phase III-A Lots 420-477 and Phase III-B with Lots 378-419.

21
22 GWC initially built Water Plant #4 as Phase III-B required a new K Zone for Fire
23 Flow rate of 1,000 gpm and received Approval of Construction on 6/25/03 in
24 ADEQ File No. 20010142.

25
26 **Q6. YOU INDICATED THAT WATER PLANT #4 WAS INITIALLY BUILT TO**
27 **PROVIDE 1,000 GPM FOR FIRE FLOW. WERE THERE ANY CHANGES**
28 **MADE TO WATER PLANT #4?**

29
30 A6. Yes, Water Plant #4 was modified to increase the Standard Fire Flow of 1,000 gpm
31 to 1,500 gpm (see ADEQ File No. 20040238, as A10 attached) at the request of

1 D.R. Horton Homes, then a part owner of GWC, to satisfy a negotiated relief to not
2 install Automatic Fire Sprinklers in Homes greater than 3,600 sq. ft. from the
3 Golder Ranch Fire District (GRFD). See GRFD Letter dated September 2003, I. g-
4 h., as A11 and GRFD Letter dated June 28, 2004, as A12 attached). This Southern
5 K Zone was the only one modified, so it is my opinion that D.R. Horton Home's
6 only interest in having Water Plant #4 modified was to save the expense and time
7 required to retrofit Automatic Fire Sprinkler Systems in the five (5) completed
8 houses on lots # 147, 157, 162, 166 and 191 along with a house that was under
9 construction on lot 193. D. R. Horton Homes should have paid for this modification
10 as it appears to have directly benefited them; however the cost was included in the
11 Fair Value Rate Base. This cost, in my opinion, should be excluded from the Fair
12 Value Rate Base.

13
14 **Q7. YOU MENTIONED THAT D. R. HORTON DID NOT HAVE TO INSTALL**
15 **AUTOMATIC FIRE SPRINKLER SYSTEMS IN HOMES GREATER THAN**
16 **3,600 SQ. FT. ACCORDING TO GRFD STANDARDS. HOW MANY**
17 **HOMES IN THIS CATEGORY DID NOT RECEIVE THE AUTOMATIC**
18 **FIRE SPRINKLER SYSTEMS?**

19
20 A7. I conducted a manual survey of ECRS (see Excel Spread Sheet "Large Houses in
21 ECRS" as A13 attached) and there are a total of fifty (50) homes in this Large
22 House Category of which Twelve (12) do not have Automatic Fire Sprinkler
23 Systems. If the Phase III-B homes had a second street entrance access, fifteen (15)
24 more homes would have been exempted. You will notice from the report that all of
25 the large homes built in Phase IV-B and V-A have fire sprinklers installed which
26 further supports the opinion that D. R. Horton Homes had another reason to Modify
27 Water Plant #4 other than their desire to not have to install Automatic Fire
28 Sprinklers in all large homes.

1 **Q8. PLEASE CONTINUE WITH YOUR HISTORY OF THE PHASED BUILD**
2 **PROCESS.**

3
4 A8. All of the homes in Phase III-A were occupied by the end of 2005. Phase III-B saw
5 15 homes occupied by year end 2005 and the remaining 27 homes were occupied
6 by year end 2006. (See Eagle Crest Ranch Phase III-A lots, as A14 and III-B, as
7 A15 attached).

8
9 Since the Phase III-B homes were located on a dead end cul-de-sac. GRFD required
10 that Automatic Fire Sprinkler systems be installed in all homes in this Phase
11 regardless of size. (See GRFD Letter last paragraph dated June 28, 2004, as A12
12 attached).

13
14 The Final Plat for ECRS Phase IV-A was approved by Pinal County on 9/11/06. It
15 included Lots 478-480, 490-505, 515-617. (See Final Plat for Eagle Crest Ranch
16 Phase IV-A, as A16 attached). This Phase was split into IV-A Lots 478-480, 490-
17 505, 515-590 that were on 45 ft. and 60 ft. lots and IV-B Lots 591-617 being 70 ft.
18 lots. There were 62 homes occupied in Phase IV-A and 7 homes in Phase IV-B by
19 Year End 2007. This made up 57% of the 122 total platted lots in this Phase. (See
20 Eagle Crest Ranch Phase IV-A, as A17 and IV-B, as A18 attached).

21
22 **Q9. WHY DO YOU BELIEVE WATER PLANT #3 IS EXCESS CAPACITY?**

23
24 A9. It is my opinion that GWC had sufficient capacity to serve Phase IV-A and IV-B as
25 GWC's first date of water service was 2/22/2007 as indicated in their response to
26 Intervenor data Request No 3.02.(See A18A attached) GWC finally received an
27 Approval of Construction on 5/2/2007 in ADEQ File No. 20060126. GWC did not
28 receive Approval of Construction on Water Plant #3 until 1/22/08 in ADEQ File
29 No. 20060727. To this point in time a total of 718 lots or 75% of ECRS lots of
30 which 545 of these lots were built and occupied leaving 173 lots to be built which
31 were included in the existing water plant capacity before Water Plant #3. It should

1 be noted that of the remaining 173 not occupied lots at year end 2007, five (5) were
2 devoted to sales and eighteen (18) were not platted leaving a net 150 available lots.
3

4 The way the Phased build process in ECRS was occurring, it is my opinion that
5 Water Plant #3 was built to solely support the future development of Building
6 Phases V-A, V-B and IV-C, future Commercial property development (332 EDUs)
7 and another potential development Eagle Crest Ranch West (ECR West) as
8 described in ACC Docket No. W-02500A-05-0443, Decision No. 68444 dated
9 2/6/2006. GWC acknowledges expanding the water storage tank in Water Plant #3
10 by 190,000 gallons for this project. GWC accepted the risk of the cost (\$73, 250)
11 for this extra capacity but not the risk for even building Water Plant #3. I question
12 whether a prudent business decision was made based on whether or not they would
13 have the added revenue stream from completed houses to pay for it. GWC withdrew
14 their application for ECR West on 4/2/2010 as motioned in ACC Docket No. W-
15 2500A-05-0443, Document No. 109740. In support of this, I also reference ACC
16 Document No. 116091 (See A.1) where the ACC Staff determined that "this water
17 plant site would not benefit the entire water system".
18

19 **Q10. PLEASE CONTINUE WITH THE HISTORY OF THE PHASED BUILD**
20 **PROCESS.**
21

22 A10. The Final Plat for Phase V was approved by Pinal County on 5/22/07. (See Final
23 Plat for Eagle Crest Ranch Phase V as A19 attached). It included Lots 719-816,
24 823, and 828-920. This Phase has been divided into Phase V-A and V-B where
25 Phase V-A is composed of 60 ft. lots numbered 729-869 at the base of the hill (See
26 A20 attached) and Phase V-B are 70 ft. lots numbered 870-920 at the top of the hill
27 where Water Plant # 3 is located. (See A21 attached) D. R. Horton built three
28 models in Phase V-A on Lot Numbers 866-868 in late 2007 which were
29 subsequently sold. All together only 16 lots out of 202 or 8% of Phase V-A & V-B
30 are built. D. R Horton sold the remaining Lots and Declarant Rights to CRVI H-
31 AZCO, LLC in the fourth quarter of 2008. CRVI H-AZCO, LLC has subsequently

1 sold sixteen (16) lots in Phase V-A to Richmond American Homes (RAH). RAH
2 has built one model and sold one home in the fourth quarter of 2010 and five homes
3 in the first quarter of 2011. These homes are still under construction.

4
5 The Final Plat for ECRS Phase IV-C was approved by Pinal County on 2/12/07.
6 (See Final Plat for Eagle Crest Ranch Phase IV-C, as A22 attached). It included
7 Lots 618-718. (See A23 attached) CRVI H-AZCO, LLC has subsequently sold
8 seventy- seven (77) lots in Phase IV-C back to D. R. Horton Homes of which
9 Nineteen (19) lots are still vacant. While construction started in 2008, the first
10 homes were not occupied until January, 2009. The total Homes occupied in 2009
11 was 18 and 34 homes in 2010. This Phase is still in active build mode with a total of
12 44 vacant lots remaining.

13
14 The remaining Phase VI lots numbered 921 to 958 are still not platted. There were
15 thoughts of a school occupying the majority of this area; however the Oracle School
16 District decided they would not use this area. D. R. Horton purchased Track E in
17 this area and made it into a small park and Ball Field which has been turned over to
18 the HOA. The Lots on Old Arena Dr. have Utilities, the rest of the lots are only
19 graded. (See A24 attached).

20
21 **Q11. WHAT ARE THE LOCAL WATER RATES IN COMMUNITIES**
22 **SURROUNDING EAGLE CREST RANCH IN COMPARISON TO GWC?**

23
24 A11. I contacted the water service providers of the nearby communities of SaddleBrook
25 which is served by Lago Del Oro Water Company (See A25), SaddleBrooke
26 Preserve which is served by the Ridgeview Utility Company (See A26),
27 SaddleBrooke Ranch which is served by Arizona Water Company (See A27), Black
28 Horse Ranch subdivision which is served by the Los Cerros Water Company, Inc.
29 (See A28) and Oro Valley which is served by the Oro Valley Water Utility. (See
30 A29) These are a reasonable sampling of the surrounding areas which are in
31 competition for house sales with Eagle Crest Ranch.

1 I calculated the water cost for a 5/8" x 3/4" meter and 7,500 gal of water.

2 The following are the results:

	<u>7,500 gal</u>	<u>Goodman Rates in Relation to Local Costs</u>
3		
4		
5	Lago Del Oro Water Co. \$22.30	353%
6	Ridgeview Utility Co. \$50.58	156%
7	Arizona Water Co. \$45.75	172%
8	Los Cerros Water Co, Inc. \$30.80	255%
9	Oro Valley Water Utility \$31.09	253%
10	Goodman Water Company \$78.68	100%

11 I also looked the WIFA Study for 2009 (See A3) where I found that GWC is the
12 highest cost water service in Pinal County for company's with 500-1000 customers.

13 It also shows that out of the 440 Water companies in the state of Arizona, 422
14 Companies are less than GWC. If GWC achieves its proposed rate increase, the cost
15 of 7,500 gallon of water will go to \$122.39

16
17 In comparing the proposed GWC water cost for 7,500 gallons to the above water
18 companies costs GWC cost will exceed the local community's water costs by:

	<u>7,500 gal</u>	<u>Goodman Proposed Rates in Relation to Local Costs</u>
19		
20		
21		
22	Lago Del Oro Water Co. \$22.30	549%
23	Ridgeview Utility Co. \$50.58	292%
24	Arizona Water Co. \$45.75	268%
25	Los Cerros Water Co, Inc. \$30.80	397%
26	Oro Valley Water Utility \$31.09	394%
27	Goodman Water Company \$78.68	156%

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According to the WIFA 2009 study, GWC will become the Second Highest cost provider for 7,500 gallons of water in the State of Arizona. My opinion here is two fold, either the home values will have to be discounted at time of sale to adjust for the water cost disparity or home buyers performing their due diligence at time of purchase will avoid buying a home in Eagle Crest Ranch.

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Appendix “A”

11

ORIGINAL

MEMORANDUM

2010 SEP -2 P 2:22

Arizona Corporation Commission

DOCKETED

SEP 2 2010

TO: Docket Control Center

FROM: Steven M. Olea
Director
Utilities Division

RECEIVED
DOCKET CONTROL

DOCKETED BY
[Signature]

DATE: September 2, 2010

RE: COMPLIANCE ITEM FOR DECISION NO. 69404 - IN THE MATTER OF THE APPLICATION OF GOODMAN WATER COMPANY FOR A RATE INCREASE (DOCKET NO. W-02500A-06-0281)

Introduction

On April 16, 2007, the Commission granted Goodman Water Company ("Company") a rate increase per Decision No. 69404. The Decision ordered:

"...Goodman Water Company shall file a hook-up fee tariff with Docket Control, as a compliance item in this Docket, for Staff's review by July 31, 2007."

Decision No. 69404, Findings of Fact No. 68, stated that in the rate proceeding no party recommended the hook-up fee matter and that the concept of the hook-up fee should be explored and the Company be directed to file a proposed hook-up fee tariff for Staff review.

Company's Filing

On July 31, 2007, the Company filed a hook-up fee ("HUF") tariff under a new docket number, W-02500A-07-0452. This new docket number was issued in error and was administratively closed and the HUF tariff filing was placed in W-02500A-06-0281 as a compliance matter.

In its filing, the Company proposed capital expenditure totaling \$940,000 for a new Well #3 and related equipment, including engineering and contingency. The Company further proposed that the proportion of construction costs to be funded by the HUF tariff is 40 percent. As a result, the Company proposed a HUF starting at \$500 for a 5/8 x 3/4-inch meter and graduated for larger meter sizes.

Staff's Review

According to the Company's Annual Report, the Company's water system consists of two wells (totaling 1,240 GPM), two storage tanks (totaling 930,000 gallons) and a distribution

Docket Control Center
September 2, 2010
Page 2

system serving 597 customers as of December 2007. Based on these plant capacities, this system can currently serve approximately 1,800 customers.

In its filing, the Company proposed capital expenditure totaling \$940,000 for a new Well #3 and related equipment, including engineering and contingency. Through data requests to the Company, Staff discovered that the capital plant and expenditure was not for a new Well #3, but actually for a Water Plant No. 3 site consisting of a 340,000 gallon storage tank and a booster system that will serve only a portion of the water system. Based on this finding, Staff has determined that the proposed Water Plant No. 3 would not meet the HUF tariff requirements because this water plant site would not benefit the entire water system. As a result, Staff concludes that this Company is not a good candidate for a HUF Tariff.

Staff's Recommendation

Staff recommends that the Commission not authorize a HUF tariff for this Company because the proposed water facilities related to the requested HUF Tariff will not benefit the entire water system. In addition, Staff concludes that the water system has sufficient capacity to meet the customer growth through 2019.

SMO:MSJ:lm

Originator: Marlin Scott, Jr.

Service List for: Goodman Water Company
Docket No. W-02500A-06-0281

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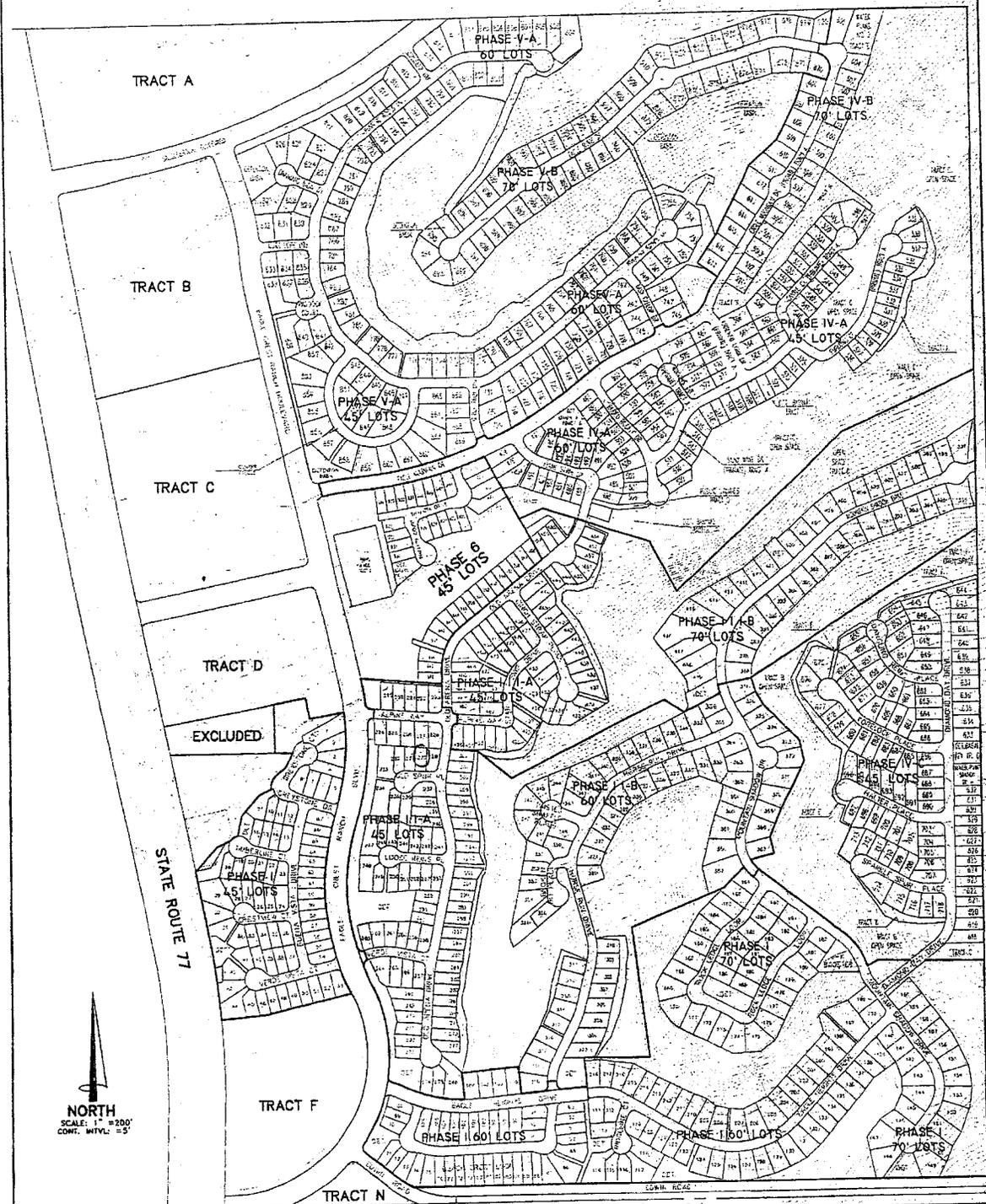
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EAGLE CREST RANCH

LOT DISPLAY



NORTH
 SCALE: 1" = 200'
 CONT. INTVL. = 5'

LOT SUMMARY	45'	60'	70'	TOTAL
PHASE I	106	55	57	218
PHASE I I-A	84	-	-	159
PHASE I I-B	-	54	21	100
PHASE I I-A	58	-	-	100
PHASE I I-B	-	-	42	100
PHASE I V-A	113	-	-	241
PHASE I V-B (45')	-	-	27	241
PHASE I V-C	101	-	-	-
PHASE V-A	-	151	-	202
PHASE V-B	-	-	51	202
SCHOOL SITE	-	-	-	-
FUTURE	40	-	-	40
TOTAL	502	260	198	960

ERROR
 NO 45 FT LOTS
 IN IV-B

EAGLE CREST RANCH

LOT DISPLAY

OPW ENGINEERING, L.L.C.
 ENGINEERING SURVEYING PLANNING
 7000 E. Tanque Verde Rd #37
 Tucson, Arizona 85715
 Sheet 1 of 3
 OPW job no. 02004-702



Water Infrastructure Finance Authority of Arizona



2009

Water and Wastewater

Residential Rate Survey for the State of Arizona

Water Infrastructure Finance Authority of Arizona

1110 West Washington, Suite 290

Phoenix, Arizona 85007

Telephone: 602.364.1310

Toll Free: 877.298.0425

Website: www.azwifa.gov

(A3)

System Name	Number of Users	Total \$ /Month /7,500 Gals
303 DWID	26	\$41.50
A. Peterson Water Co.	46	\$31.90
Abra Water Co. Inc.	625	\$30.14
Adamant Mutual Water Co.	261	\$15.50
Aguila Water Services, Inc.	319	\$49.48
Ajo DWID	142	\$47.30
Ajo Improvement Co. - Water Div.	1,117	\$30.09
Alpine Water System, Inc.	205	\$55.55
American Ranch DWID	NR	\$53.20
Antelope Lakes Water Company	2	\$30.00
Antelope Run Water Company	245	\$7.50
Antelope Water Company	63	\$21.25
Antelope Water Company - Yarnell	237	\$92.53
Anway Manville LLC Water Co.	240	\$56.25
Apache Junction Water Utilities CFD	3,748	\$40.04
Appaloosa Water Company	236	\$41.25
Arivaca Townsite Coop Water Co.	123	\$12.38
Ashcreek Water Company	105	\$35.03
Ashfork Water Service	212	\$41.04
Aubrey Water Company	333	\$27.88
Avondale	22,892	\$17.88
Avra Water Cooperative, Inc.	2,556	\$44.79
AZ -American Water Co. - Agua Fria	36,453	\$31.71
AZ -American Water Co. - Anthem	8,615	\$32.13
AZ -American Water Co. - Havasu	1,637	\$43.43
AZ -American Water Co. - Mohave	15,666	\$17.24
AZ -American Water Co. - Paradise Valley	4,770	\$33.53
AZ -American Water Co. - Sun City	22,768	\$16.13
AZ -American Water Co. - Sun City West	15,379	\$34.77
AZ -American Water Co. -Tubac	587	\$43.90

System Name	Number of Users	Total \$ /Month /7,500 Gals
AZ Water Company - Ajo	679	\$59.29
AZ Water Company - Ajo Heights	688	\$59.29
AZ Water Company - Apache Junction	19,257	\$34.06
AZ Water Company - Bisbee	3,410	\$35.78
AZ Water Company - Casa Grande	22,585	\$24.36
AZ Water Company - Coolidge	4,582	\$24.37
AZ Water Company - Lakeside	4,956	\$49.24
AZ Water Company - Miami	3,030	\$38.99
AZ Water Company - Oracle	1,526	\$56.70
AZ Water Company - Overgaard	4,123	\$51.85
AZ Water Company - Pinewood	2,879	\$48.14
AZ Water Company - Rim Rock	1,226	\$51.58
AZ Water Company - Saddlebrook	51	\$45.75
AZ Water Company - San Manuel	1,496	\$43.25
AZ Water Company - Sedona	6,309	\$31.36
AZ Water Company - Sierra Vista	2,915	\$27.49
AZ Water Company - Stanfield	204	\$37.42
AZ Water Company - Superior	1,283	\$35.80
AZ Water Company - White Tank	1,880	\$38.16
AZ Water Company - Winkelman	160	\$21.47
Baca Float Water Company	271	\$29.50
Bachmann Springs Utility Company	2	\$38.75
Beardsley Water Company, Inc.	423	\$37.21
Beaver Dam Water Company, Inc.	303	\$26.25
Beaver Valley Water Company, Inc.	192	\$13.65
Bella Vista Water Company, Inc.	8,520	\$25.00
Bellefont Water Co.	5	\$42.83
Benson	1,914	\$20.50
Bermuda Water Company	7,672	\$20.99
Bernell Water Company	529	\$8.20



(A3)

System Name	Number of Users	Total \$ /Month /7,500 Gals
Biassi Water Company, Inc.	149	\$37.50
Bidegain Water Company	NR	\$19.73
Big Park Water Company	3,022	\$33.34
Black Canyon DWID	830	\$35.00
Blue Hills No. 3	64	\$41.25
Bonita Creek Water Co.	43	\$86.00
Bowie DWID	350	\$35.00
Boynton Canyon Enchantment HOA	101	\$53.63
Bradshaw Mountain View Water Co.	575	\$32.92
Bradshaw Water Company, Inc.	168	\$71.13
Brooke Water LLC - Holiday Harbor	222	\$46.38
Brooke Water LLC - Lakeside	851	\$46.38
Brooke Water LLC - Marina Village	226	\$46.38
Brooke Water LLC - Movalya Keys	551	\$46.38
Brooke Water LLC - Parker Dam	187	\$46.38
Brooke Water LLC - Payson	1,118	\$34.19
Brooke Water LLC - Pine Water Co.	2,011	\$52.88
Brooke Water LLC - Rio Lindo	31	\$46.38
Brooke Water LLC - Strawberry Water Co.	1,062	\$52.88
Brooke Water LLC - Tonto Basin	799	\$30.36
Brooke Water LLC -Parent Co.	2,182	\$46.38
Buckeye (Sundance)	incl	\$34.78
Buckeye (Sunora)	incl	\$17.43
Buckeye (Town)	10,998	\$31.82
Caballeros Water Company, Inc.	50	\$15.50
Cactus-Stellar Limited (May-Sept)	16	\$34.50
Cactus-Stellar Limited (Oct - April)	16	\$22.50
Camp Verde Water System	1,461	\$48.88
Carefree Water Company	1,800	\$57.28
Carter's Water Company	13	\$20.00

System Name	Number of Users	Total \$ /Month /7,500 Gals
Casa Grande South Water Co.	70	\$29.83
Casa Grande West Water Co.	283	\$24.60
Cave Creek Water Company	2,513	\$74.38
C-D Oasis Water Company	11	\$32.40
Cedar Grove Water	368	\$41.13
Cerbat Water Company	279	\$31.88
Chandler (Summer)	73,600	\$19.31
Chandler (Winter)	73,600	\$19.31
Chaparral City Water Company	13,345	\$29.98
Chaparral Water Company	335	\$26.55
Chino Meadows II Water Company	889	\$39.03
Chino Valley	18,443	\$34.39
Chloride DWID	188	\$89.00
Cienega Water Company, Inc.	68	\$67.50
Circle City Water Company, L.L.C.	186	\$21.48
Citrus Park Water Co., Inc.	19	\$31.25
Clarkdale	1,780	\$49.50
Clay Springs DWID	151	\$43.70
Clear Springs Utility Co., Inc.	588	\$24.88
Clearwater Utilities Company, Inc.	832	\$32.78
Clifton 06-002 - Morenci Water and Electric	709	\$17.34
Cloud Nine Water Company Inc.,	52	\$14.88
Coldwater Canyon Water Company	399	\$18.60
Colorado City	902	\$30.25
Community Water Co. of Green Valley	9,997	\$22.94
Congress DWID	731	\$54.50
Cordes Lakes Water Co.	1,342	\$29.85
Cottonwood	8,968	\$35.85
CP Water Company	16	\$6.25
Cross Creek Ranch Water Company	13	\$56.00



(A3)

System Name	Number of Users	Total \$ /Month /7,500 Gals
Dateland Public Service	110	\$34.75
Dateland Water	15	\$25.00
Dells Water Company	75	\$24.38
Desert Hills Water Co., Inc.	1,697	\$74.38
Desert Valencia Water System	11	\$11.75
Diablo Village Water Company	871	\$42.50
Diamond Valley Water Users	631	\$71.05
Diversified Water Utilities, Inc.	1,361	\$54.88
Doney Park Water (summer)	3,340	\$57.53
Doney Park Water (winter)	3,340	\$53.20
Double R Water Distributors, Inc.	NR	\$26.20
Douglas	5,491	\$17.59
Dragon Water Co., Inc.	137	\$66.05
DS Water Company	89	\$35.97
Duncan	331	\$32.19
Duncan - Hunter Estates	55	\$32.19
Eagar	1,931	\$20.74
Eagletail Water Company, LC	56	\$49.73
East Slope Water Company	822	\$17.55
Eden Water Company, Inc.	126	\$36.00
Ehrenberg Improvement Assoc.	295	\$24.35
EI Mirage	11,369	\$36.30
EI Prado Water Co., Inc.	137	\$32.68
Elfrida Domestic Water Users Assoc.	227	\$18.25
Eloy	2,651	\$25.71
Empirita Water Company, LLC	30	\$54.38
Escapes at North Ranch	410	\$21.00
F & F Water Company	NR	\$5.88
Far West Water & Sewer, Inc.	14,930	\$27.81
Farmers Water Company	1,955	\$16.38

System Name	Number of Users	Total \$ /Month /7,500 Gals
Fisher's Landing Water & Sewer Works	79	\$12.00
Flagstaff	18,792	\$30.51
Flagstaff Ranch Water Company, Inc.	218	\$46.18
Florence	3,955	\$26.88
Flowing Wells Irrigation	3,390	\$25.50
Foods Hollow Water Company	318	\$33.88
Forest Highlands Water Company	722	\$54.80
Forest Lake DWID	870	\$40.00
Fort Mohave Tribal Utilities Authority	862	\$21.00
Francesca Water Co., Inc.	131	\$24.35
Fredonia	719	\$23.13
Gadsden Water Co., Inc.	196	\$14.50
Gila Bend	651	\$24.30
Gilbert	69,341	\$22.73
Glendale	60,958	\$23.59
Globe	3,512	\$25.45
Golden Corridor Water Co.	52	\$34.75
Golden Shores Water Co., Inc.	1,495	\$25.88
Golden Valley DWID	1,528	\$36.13
Goodman Water Co.	628	\$78.69
Goodyear	12,604	\$27.12
Graham County Utilities Inc. - Water	1,203	\$35.93
Grand Canyon Caverns & Inn	9	\$21.25
Grandmew Water Co., Inc.	20	\$5.00
Granite Dells Water Co.	12	\$14.05
Granite Mountain Water Co., Inc.	96	\$53.00
Granite Oaks Water Users Assoc.	452	\$31.00
Green Acres Water Company	52	\$84.88
Green Valley DWID	4,606	\$29.60
Greenehaven Water Co., Inc.	261	\$18.75



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System Name	Number of Users	Total \$ /Month /7,500 Gals
Groom Creek Water Users Assoc.	228	\$38.75
H2O, Inc.	6,668	\$26.57
Halcyon Acres Annex #2 Water Co.	35	\$29.05
Halcyon Acres Water Users Assoc.	77	\$10.00
Hatch Valley Water Company	70	\$30.63
Haxasu Heights DWID	145	\$19.13
Hayden	275	\$9.63
Heber Domestic DWID	345	\$33.75
Heckethorn Water Company	44	\$43.40
High Country Pines Water Company	199	\$47.63
Highland Pines DWID	349	\$201.78
Hillcrest Water Company	197	\$37.50
Holbrook -Summer	1,847	\$18.13
Holbrook -Winter	1,847	\$19.63
Holiday Hills DWID	49	\$87.50
Holiday Water Company	157	\$29.10
Ho-Tye Water Company	3	\$40.88
Huachuca City	775	\$21.00
Humboldt Water Systems, Inc.	326	\$37.80
ICR Water Users Assoc.	375	\$38.20
Indiada Water Company, Inc.	56	\$34.25
J.N.J. Enterprises L.L.C.	258	\$50.38
Jackson Acres Water District	15	\$20.00
Jackson Spring Estates HOA	14	\$23.00
Jake's Corner Water System	19	\$24.03
Jerome	305	\$25.94
Johnson Utilities Company	16,414	\$44.00
Joshua Valley Utility Company	995	\$40.25
Katherine Resort Water Company	46	\$54.73
Kearny	841	\$29.70

System Name	Number of Users	Total \$ /Month /7,500 Gals
Keaton Development Company	496	\$38.50
Kingman	18,519	\$26.89
Kohl's Ranch Water Company	123	\$7.00
Kokopelli Springs Resort	40	\$21.80
La Casita Water Company, Inc.	441	\$47.25
Lago Del Oro Water Company	6,046	\$22.30
Lagoon Estates Water Company, Inc.	385	\$27.25
Lake Havasu City	28,864	\$18.70
Lake Verde Water Company	63	\$23.50
Lakewood Water Company	302	\$20.90
Las Quintas Serenas Water Company	1,019	\$29.20
Lazy C Water Service	133	\$43.59
Litchfield Park Service Company -Water	15,293	\$15.95
Little Park Water Company	68	\$28.00
Livco Water Company	373	\$28.25
Loma Estate Water Co.	31	\$64.00
Loma Linda Water Company	126	\$38.61
Lord Arizona Water Systems Inc.	337	\$38.12
Los Cerros Water Co., Inc.	816	\$30.80
Lucky Hills Water Company	4	\$36.38
Lyn-Lee Water	41	\$29.63
Mammoth	580	\$25.00
Marana	5,284	\$32.52
Marana DWID	837	\$40.28
Maricopa DWID	383	\$33.00
Mayer DWID	575	\$43.50
McAdams Water Company	6	\$34.25
McNeal Water Company (MWC, Inc.)	25	\$43.35
Mesa	134,567	\$28.73
Mesaland Water Company	97	\$16.20



System Name	Number of Users	Total \$ /Month /7,500 Gals
Mescal Lakes Water Systems, Inc.	553	\$42.75
Metropolitan DWID (Tucson)	18,230	\$32.66
Michael's Ranch Water User's Assoc.	24	\$51.53
Mile Post 54 Community Water Well	15	\$20.00
Mirabell Water Company, Inc.	61	\$39.63
Mohawk Utility Company	137	\$29.00
Monte Vista Water Co., L.L.C.	40	\$11.50
Montezuma Rinrock Water Co., LLC	206	\$43.61
Morenci Water and Electric Company	1,275	\$18.73
Morrison Lake Water Co.	140	\$101.73
Morristown Water Company	50	\$32.50
Mountain Dell Water, Inc.	86	\$46.63
Mountain Glen Water Service (consol.)	385	\$44.85
Mt. Lemmon DWID	290	\$97.35
Mt. Tipton Water Co.	691	\$50.00
Naco Water Company, L.L.C.	373	\$76.47
Navajo Water Co., Inc.	318	\$42.44
New River Utilities Company	2,741	\$16.50
Nogales	5,344	\$18.38
North Mohave Valley Corporation	1,883	\$25.30
Northern Sunrise Water Company	353	\$47.87
Oak Creek Public Service Co.	311	\$27.15
Oak Creek Utility Corporation	34	\$56.70
Oak Creek Water Co., No. 1	694	\$21.34
Ojo Bonito Estates DWID	32	\$41.50
Orange Grove Water Company	314	\$21.00
Oro Valley	18,401	\$31.09
Page	2,932	\$20.78
Papago Butte DWID, IWDD	166	\$34.25
Paradise Trails Pioneer Valley	29	\$26.20

System Name	Number of Users	Total \$ /Month /7,500 Gals
Park Valley Water Company	510	\$33.88
Park Water Company, Inc.	129	\$39.30
Parker	1,173	\$23.13
Parker Lakeview Estates HOA, Inc.	40	\$55.10
Patagonia	400	\$19.58
Payson	7,703	\$36.35
Peoples Valley Water Company	218	\$50.08
Peoria	48,234	\$29.53
Phoenix - Spring & Fall Rates	402,926	\$15.74
Phoenix - Summer rates	402,926	\$7.71
Phoenix - Winter Rates	402,926	\$14.21
Picacho Peak Water Company	14	\$44.76
Picacho Water Company	147	\$37.50
Picacho Water Improvement	136	\$22.25
Pima Utility Company	10,150	\$11.68
Pine Valley Water Company	163	\$49.36
Pine Water Assoc. DWID	60	\$100.00
Pinecrest Water Company	37	\$64.50
Pinedale DWID	136	\$24.25
Pinetop Water Comm. Facilities Dist.	1,237	\$39.59
Pineview Water Co.	1,133	\$43.70
Poderosa Utility Company	539	\$45.75
Ponderosa Park DWID	291	\$87.04
Porter Mountain DWID	123	\$33.45
Prescott	22,043	\$34.53
Prescott Valley	17,997	\$29.78
Pueblo Del Sol Water Company	5,062	\$28.40
Q Mountain Mobile Home Park	219	\$27.00
Q Mountain Water	449	\$30.00
Quail Canyon DWID	NR	\$75.85



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System Name	Number of Users	Total \$ /Month /7,500 Gals
Quail Creek Water Company	1,585	\$36.00
Quail Ridge DWID	NR	\$51.25
Quartzsite	842	\$26.50
Queen Creek Water Company	8,770	\$20.45
Queen Valley DWID	575	\$47.34
RAINDANCE WATER CO-OP	69	\$42.63
Rancheros Bonitos Water Co., L.L.C.	38	\$20.00
Rancho Del Conejo Water Co-Op	325	\$26.25
Rancho Sahuarita Water Co. L.L.C.	4,515	\$32.43
Ray Water Company	1,519	\$22.78
Red Rock Utilities, LLC.	NR	\$44.88
Ridgeview Utility Company	71	\$50.58
Rigby Water Company (combined)	337	\$22.50
Rillito Water Users Association	53	\$10.75
Rim Trail DWID	88	\$107.00
Rincon Ranch Estates Water Company	231	\$36.40
Rincon Water Company	70	\$57.50
Rio Rico Utilities Inc.	6,587	\$18.16
Rio Verde Utilities - Water	1,652	\$20.93
Roosevelt Lake Resort, Inc.	132	\$46.10
Rose Valley Water Company	2,399	\$15.98
Sabrosa Water Company	52	\$98.00
Safford	7,524	\$28.48
Saguaro Acres CFD	73	\$29.08
Saguaro Water Company	976	\$40.93
Sahuarita Water Company	5,102	\$32.43
San Luis	4,738	\$14.61
Sandarrio Water Company	359	\$25.03
Santa Cruz Water Company	16,457	\$41.90
Scottsdale	87,441	\$37.05

System Name	Number of Users	Total \$ /Month /7,500 Gals
Serviceberry Water Co. (Vernon Valley)	19	\$44.50
Seven Canyons Water Co.	53	\$83.75
Seven Ranches DWID	26	\$33.00
Shepard Water Company	124	\$21.60
Show Low	4,489	\$27.24
Sierrita Mountain Water Company	77	\$44.85
Signal Peak Water Company, Inc.	36	\$28.00
Silverbell Irrigation & Drainage District	110	\$36.13
Sitgreaves Water Company	70	\$33.00
Sky-Hi DWID	130	\$50.25
Sleepy Hollow Mobile Home Estates (s)	106	\$14.32
Sleepy Hollow Mobile Home Estates (w)	106	\$14.32
Snowflake	1,810	\$27.04
SoHi DWID	223	\$48.75
Solitude Trails DWID	47	\$97.50
Somerton	2,897	\$17.75
Sonoma Valley Water Company	97	\$59.55
South Rainbow Valley Water Coop.	5	\$22.50
Southern Sunrise Water Co	836	\$47.87
Southern Water Corporation	38	\$33.46
Southern Utilities Company, Inc.	625	\$9.98
Spanish Trail Water Co.	396	\$23.63
Springville	766	\$19.13
St. David DWID	526	\$21.80
St. David Springs	3	\$5.88
St. Johns	1,196	\$20.25
Starlight Water Company, Inc.	671	\$65.20
Sterling Water Company	NR	\$33.25
Stoneman Lake Water Company, Inc.	74	\$15.00
Sulger Water Company, #2	15	\$18.20



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System Name	Number of Users	Total \$ /Month /7,500 Gals
Sun Leisure Estates Utilities Co., Inc.	57	\$21.50
Sun Valley Farms -Unit VI Water Co.	225	\$22.50
Sunizona Water Company	34	\$33.13
Sunland Water Company	73	\$9.63
Sunrise Vistas Utilities Company	666	\$34.95
Sunrise Water Company	1,345	\$32.75
Surprise	13,133	\$31.39
T.K. Water Service	47	\$30.85
Tacna Water Company	143	\$20.36
Tall Pine Estates Water & Imp. Assoc. Inc.	71	\$7.50
Taylor	1,254	\$13.15
Tempe	35,877	\$19.17
Thin Utility Co.	397	\$34.50
Thin Water Corporation	74	\$35.00
Thunderbird Farms WID	570	\$24.00
Thunderbird Meadows	128	\$50.16
Tierra Buena Water Company	126	\$26.50
Tierra Linda Homeowners Assoc.	47	\$44.33
Tierra Mesa Estates Water Company, Inc.	230	\$23.00
Timberland Acres DWID	324	\$39.25
Tolleson	1,563	\$27.48
Tombstone	869	\$38.46
Tonto Creek Utility Co.	71	\$36.13
Tonto Hills Utility Co.	130	\$102.90
Tonto Village Water Company	198	\$12.83
Tortolita Water Co., Inc.	2	\$55.90
Truxton Canyon Water Company, Inc.	1,056	\$31.50
Tubac Water Company, Inc.	NR	\$13.50
Tucson	223,614	\$19.57
Turner Ranches Water & Sanitation	112	\$49.02

System Name	Number of Users	Total \$ /Month /7,500 Gals
Utility Source, LLC	332	\$62.76
Vail Water Company	3,425	\$45.58
Vail Water Company	3,425	\$51.00
Valencia Water Co., Greater Buckeye Div.	652	\$36.63
Valencia Water Company, Inc.	5,302	\$34.45
Valle Verde Water Company	800	\$21.50
Valley Pioneers Water Co., Inc.	2,314	\$38.25
Valley Utilities Water Co., Inc.	1,403	\$31.77
Valley View Water Company, Inc.	NR	\$47.38
Verde Lakes Water Corporation	787	\$20.45
Verde Lee Water Company	182	\$35.25
Verde Santa Fe Water Company, L.L.C.	NR	\$15.00
Vernon DWID	30	\$40.25
Vernon Valley Water Company	19	\$44.50
Villa Grande DWID	99	\$51.23
Virgin Mountain Utilities Corporation	1	\$42.50
Viva Development Corporation	NR	\$10.13
Voyager Water Company	1,027	\$26.00
Walden Meadow Comm. Co-op	297	\$42.00
Walnut Creek Water Company, Inc.	254	\$26.00
Watco, Inc. (prev. Silver Well Svcs)	302	\$49.00
Water Utility of Greater Buckeye, Inc.	616	\$36.63
Water Utility of Greater Topopah, Inc.	359	\$48.25
Water Utility of Northern Scottsdale	75	\$98.00
Wellton	908	\$22.70
Wenden DWID	228	\$37.99
West End Water Company	233	\$42.60
West Village Water Company	55	\$63.88
Whetstone DWID	372	\$42.88
White Hills Water Co., Inc.	94	\$87.25



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System Name	Number of Users	Total \$ /Month /7,500 Gals
White Mountain Summer Homes W/D	468	\$56.70
White Mountain Water Company	195	\$45.20
Why Utility Company, Inc.	90	\$47.00
Wickenburg	2,418	\$13.50
Wilhoit Water Company, Inc.	64	\$41.25
Willcox	1,907	\$26.42
Williams	2,712	\$45.70
Willow Lakes Property Owners Assoc.	79	\$41.88
Willow Valley Water Company	1,581	\$24.50
Winchester Water Company, L.L.C.	137	\$20.03
Winslow	3,022	\$20.39
Winslow West Water Company, Inc.	10	\$8.25
Woodruff D/W/D	62	\$26.88
Woodruff Water Co., Inc. W-04264A	4	\$39.24
Worden Water Company	24	\$24.75
Yarnell Water Improvement Assn.	619	\$53.08
Yavapai Country Club Water Company	36	\$63.58
Yavapai Estates	95	\$32.53
Yucca Water Association, Inc.	105	\$17.50
Yuma	28,500	\$29.86



EXHIBIT B
2009 RESIDENTIAL RATE SURVEY
STATISTICAL SUMMARY



ARIZONA DRINKING WATER SYSTEMS - 2009
Monthly Charges - Varying Levels of Usage by Ownership

		Average Monthly Charge	Median Monthly Charge	Highest Monthly Charge	Lowest Monthly Charge
Municipal	5,000 Gallons	\$20.85	\$20.53	\$66.25	\$6.64
	7,500 Gallons	\$25.86	\$25.23	\$74.38	\$7.71
	10,000 Gallons	\$31.47	\$29.67	\$82.50	\$11.50
Districts	5,000 Gallons	\$39.06	\$34.24	\$123.26	\$12.75
	7,500 Gallons	\$50.46	\$40.25	\$201.78	\$19.13
	10,000 Gallons	\$62.85	\$49.00	\$310.50	\$25.30
* Investors	5,000 Gallons	\$28.91	\$27.50	\$83.00	\$5.00
	7,500 Gallons	\$35.89 *	\$33.97	\$102.90	\$5.00
	10,000 Gallons	\$43.01	\$40.50	\$133.90	\$5.00
Associations	5,000 Gallons	\$28.67	\$27.81	\$68.50	\$7.50
	7,500 Gallons	\$36.19	\$35.22	\$86.00	\$10.00
	10,000 Gallons	\$44.13	\$42.53	\$105.00	\$12.50
Arizona Survey Total	5,000 Gallons	\$28.75	\$26.74	\$123.26	\$5.00
	7,500 Gallons	\$35.97	\$32.96	\$201.78	\$5.00
	10,000 Gallons	\$43.52	\$39.14	\$310.50	\$5.00



EXHIBIT E
2009 RESIDENTIAL RATE SURVEY
STATISTICAL SUMMARY



ARIZONA DRINKING WATER SYSTEMS - 2009

		Monthly Charges - Varying Levels of Usage by Connections			
		Average Monthly Charge	Median Monthly Charge	Highest Monthly Charge	Lowest Monthly Charge
Over 50,000 Connections					
5,000 Gallons		\$16.24	\$15.61	\$32.55	\$6.64
7,500 Gallons		\$20.80	\$19.44	\$37.05	\$7.71
10,000 Gallons		\$26.65	\$23.85	\$45.43	\$17.49
10,000-50,000 Connections					
5,000 Gallons		\$22.44	\$23.70	\$38.25	\$9.38
7,500 Gallons		\$28.04	\$29.92	\$44.00	\$11.68
10,000 Gallons		\$34.12	\$36.52	\$50.25	\$13.98
5,000-10,000 Connections					
5,000 Gallons		\$21.86	\$22.39	\$28.60	\$13.91
7,500 Gallons		\$26.91	\$27.49	\$36.35	\$17.59
10,000 Gallons		\$32.01	\$31.30	\$45.10	\$19.64
1,000-5,000 Connections					
5,000 Gallons		\$27.66	\$26.29	\$66.25	\$10.90
7,500 Gallons		\$34.46	\$32.10	\$74.38	\$13.15
10,000 Gallons		\$41.53	\$37.44	\$82.50	\$15.40
* 500-1,000 Connections					
5,000 Gallons		\$29.52	\$29.60	\$63.91	\$6.47
7,500 Gallons		\$36.20	\$34.98	\$78.69	\$8.20
10,000 Gallons		\$43.27	\$40.48	\$94.66	\$9.92
Under 500 Connections					
5,000 Gallons		\$30.78	\$28.88	\$123.26	\$5.00
7,500 Gallons		\$38.86	\$35.02	\$201.78	\$5.00
10,000 Gallons		\$47.25	\$41.96	\$310.50	\$5.00



EXHIBIT G
2009 RESIDENTIAL RATE SURVEY
STATISTICAL SUMMARY



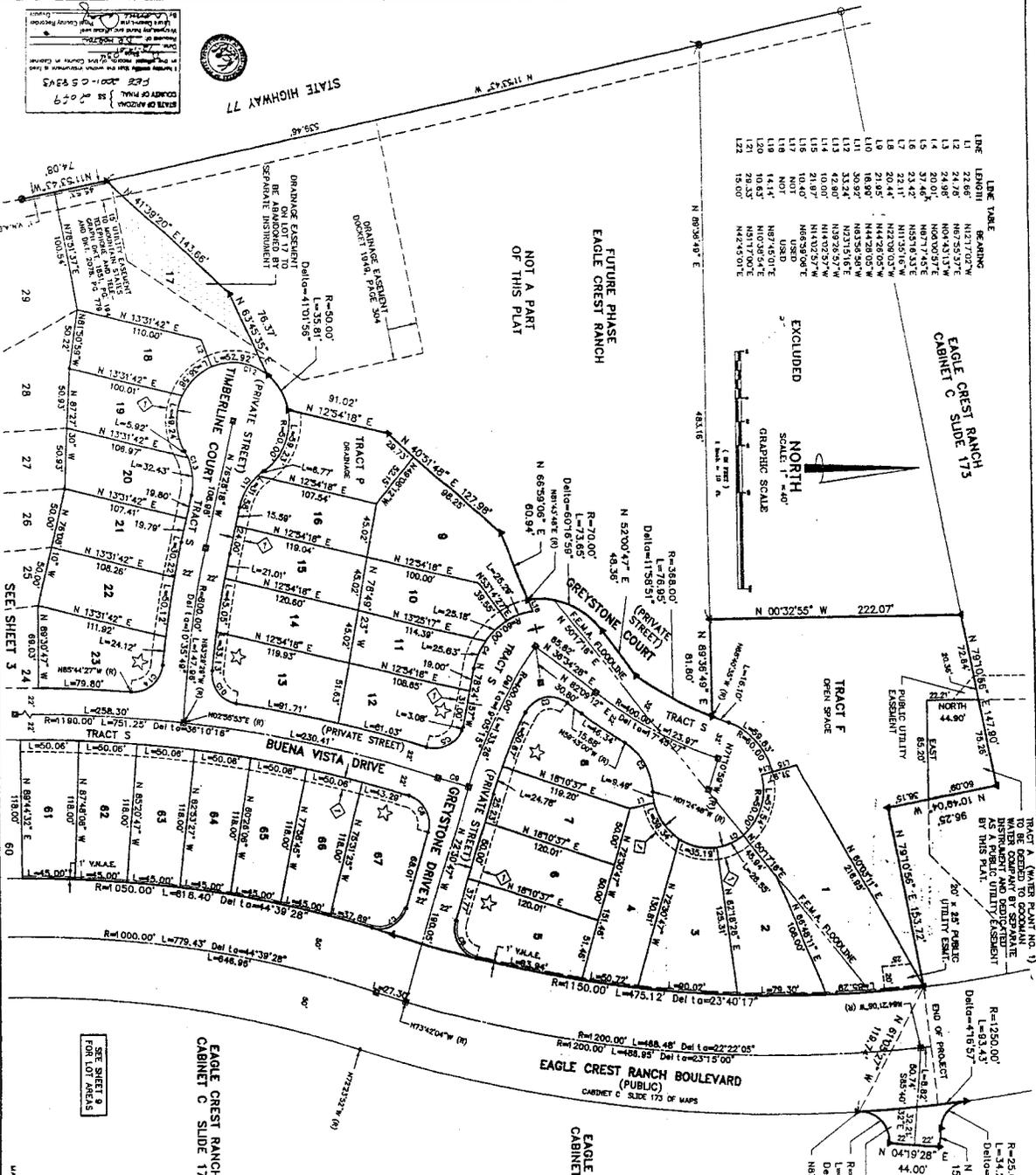
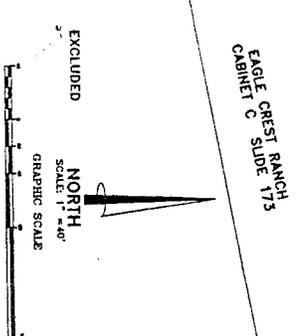
ARIZONA DRINKING WATER SYSTEMS - 2009
Monthly Charges by County for 7,500 Gallons

	Average Monthly Charge	Median Monthly Charge	Highest Monthly Charge	Lowest Monthly Charge
Apache County	\$35.97	\$38.12	\$64.50	\$19.13
Cochise County	\$31.40	\$28.75	\$76.47	\$5.88
Cocoino County	\$42.48	\$45.73	\$101.73	\$7.50
Gila County	\$44.25	\$36.35	\$107.00	\$7.00
Graham County	\$33.86	\$35.48	\$36.00	\$28.48
Greenlee County	\$29.05	\$32.19	\$38.61	\$17.34
La Paz County	\$35.31	\$32.25	\$67.50	\$23.13
Maricopa County	\$32.49	\$29.76	\$102.90	\$5.00
Mohave County	\$34.63	\$30.63	\$89.00	\$17.24
Navajo County	\$36.48	\$36.57	\$56.70	\$13.15
Pima County	\$33.89	\$32.43	\$97.35	\$10.00
Pinal County	\$34.48	\$34.50	\$78.69 *	\$6.25
Santa Cruz County	\$25.72	\$21.50	\$43.90	\$13.50
Yavapai County	\$45.58	\$41.38	\$201.78	\$14.05
Yuma County	\$25.78	\$22.15	\$84.88	\$11.75
Arizona Survey Total - 2009 7,500 Gallons	\$35.97	\$32.96	\$201.78	\$5.00



LINE TABLE

LINE	LENGTH	BEARING
L1	22.86	N127°07'W
L2	24.76	N83°33'37"E
L3	24.00	N03°00'00"E
L4	20.00	N03°00'00"E
L5	37.48	N87°14'56"E
L6	23.42	N53°16'35"E
L7	22.11	N133°16'30"W
L8	21.85	N44°26'05"W
L9	21.85	N44°26'05"W
L10	16.86	N44°26'05"W
L11	30.92	N53°36'30"W
L12	23.24	N53°36'30"W
L13	23.24	N53°36'30"W
L14	10.00	N44°26'05"W
L15	21.87	N44°26'05"W
L16	10.40	N83°36'30"E
L17	10.40	N83°36'30"E
L18	14.14	N87°45'01"E
L19	10.43	N103°56'41"E
L20	10.43	N103°56'41"E
L21	19.33	N42°45'01"E
L22	19.33	N42°45'01"E



CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	50.00'	108.11'	43.80'	127.30°
C2	50.00'	50.88'	27.88'	58.18°
C3	50.00'	74.00'	44.11'	72.40°
C4	50.00'	36.35'	22.24'	33.18°
C5	25.00'	38.86'	23.39'	60.33°
C6	25.00'	38.86'	23.39'	60.33°
C7	25.00'	38.86'	23.39'	60.33°
C8	100.00'	26.82'	13.46'	131.37°
C9	25.00'	38.33'	23.88'	67.36°
C10	50.00'	38.33'	23.88'	67.36°
C11	50.00'	38.33'	23.88'	67.36°
C12	50.00'	23.37'	10.17'	43.98°
C13	50.00'	23.37'	10.17'	43.98°
C14	25.00'	38.40'	24.15'	68.00°
C15	25.00'	38.83'	24.58'	68.39°
C16	50.00'	53.76'	31.18'	63.53°
C17	50.00'	27.24'	13.62'	36.30°
C18	50.00'	27.24'	13.62'	36.30°
C19	50.00'	40.28'	26.05'	62.70°
C20	50.00'	65.76'	31.18'	63.53°
C21	50.00'	212.64'	80.18'	233.34°
C22	50.00'	40.45'	26.21'	62.42°
C23	25.00'	39.15'	24.85'	68.43°
C24	25.00'	39.15'	24.85'	68.43°
C25	25.00'	39.15'	24.85'	68.43°
C26	25.00'	37.66'	23.44'	66.18°
C27	25.00'	37.66'	23.44'	66.18°
C28	25.00'	38.47'	24.21'	68.08°
C29	80.00'	127.32'	107.23'	121.03°
C30	80.00'	157.27'	80.01'	112.38°
C31	25.00'	11.27'	6.01'	13.28°
C32	25.00'	11.27'	6.01'	13.28°
C33	25.00'	44.62'	31.01'	102.71°
C34	25.00'	44.62'	31.01'	102.71°
C35	25.00'	44.62'	31.01'	102.71°
C36	25.00'	44.62'	31.01'	102.71°
C37	80.00'	33.26'	17.27'	38.08°
C38	80.00'	232.72'	52.86'	288.43°
C39	50.00'	48.52'	28.36'	52.34°
C40	25.00'	48.52'	28.36'	52.34°
C41	25.00'	48.52'	28.36'	52.34°
C42	50.00'	36.35'	20.17'	43.98°
C43	50.00'	36.35'	20.17'	43.98°
C44	50.00'	36.35'	20.17'	43.98°
C45	50.00'	36.35'	20.17'	43.98°
C46	25.00'	38.27'	25.00'	90.00°
C47	25.00'	38.27'	25.00'	90.00°
C48	25.00'	38.27'	25.00'	90.00°
C49	25.00'	38.27'	25.00'	90.00°
C50	25.00'	10.88'	6.91°	14.90°
C51	25.00'	10.88'	6.91°	14.90°
C52	80.00'	127.66'	107.82'	121.04°
C53	203.00'	15.82'	8.42'	44.43°
C54	181.00'	15.82'	7.80'	44.43°
C55	158.00'	13.18'	6.92'	44.43°

EAGLE CREST RANCH
CABINET C SLIDE 173

EAGLE CREST RANCH I
 LOTS 1 THROUGH 28

A RESUBDIVISION OF TRACTS G AND H AND PORTIONS OF TRACTS E, I, J AND M OF EAGLE CREST RANCH TRACTS A THROUGH N, PINAL COUNTY CABINET C SLIDE 173, A PORTION OF SECTION 32, T10S 17N, R14E, GEBERAN PINAL COUNTY, ARIZONA.

OPW & ASSOCIATES, INC.
 ENGINEERING SURVEYING PLANNING
 2225 East Grant Road
 Phoenix, Arizona 85016
 P-034-00

Owner_Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Phase I Lots 1-218					
Private Resident Home	1		013	60200 E Timberline Ct	2002/09/23
Private Resident Home	1		014	60188 E Timberline Ct	2002/09/23
Private Resident Home	1		023	60195 E Timberline Ct	2002/09/25
Private Resident Home	1		075	60391 E Black Crest Lp	2002/09/25
Private Resident Home	1		020	60147 E Timberline Ct	2002/09/30
Private Resident Home	1		029	60116 E Crestview Ct	2002/09/30
Private Resident Home	1		022	60179 E Timberline Ct	2002/10/07
Private Resident Home	1		026	60164 E Crestview Ct	2002/10/24
Private Resident Home	1		017	60099 E Timberline Ct	2002/10/31
Private Resident Home	1		107	60444 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		109	60488 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		110	60510 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		130	60881 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		199	60962 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		210	60764 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		213	60710 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		214	60692 E Eagle Heights Dr	2002/11/14
Private Resident Home	1		011	60193 E Greystone Dr	2002/11/15
Private Resident Home	1		073	60363 E Black Crest Lp	2002/11/25
Private Resident Home	1		077	60419 E Black Crest Lp	2002/11/27
Private Resident Home	1		012	60209 E Greystone Dr	2002/12/10
Private Resident Home	1		025	60180 E Crestview Ct	2002/12/10
Private Resident Home	1		015	60176 E Timberline Ct	2002/12/12
				TOTAL 2002 Lots	23
Private Resident Home	1		067	39673 S Buena Vista Dr	2003/01/14
Private Resident Home	1		079	60447 E Black Crest Lp	2003/01/20
Private Resident Home	1		083	60503 E Black Crest Lp	2003/01/22
Private Resident Home	1		028	60132 E Crestview Ct	2003/01/28
Private Resident Home	1		033	60149 E Crestview Ct	2003/02/05
Private Resident Home	1		036	60197 E Crestview Ct	2003/02/13
Private Resident Home	1		035	60181 E Crestview Ct	2003/02/14
Private Resident Home	1		009	60163 E Greystone Dr	2003/02/18
Private Resident Home	1		008	60224 E Greystone Dr	2003/02/21
Private Resident Home	1		063	39729 S Buena Vista Dr	2003/02/21
Private Resident Home	1		078	60433 E Black Crest Lp	2003/02/24
Private Resident Home	1		061	39757 S Buena Vista Dr	2003/02/25
Private Resident Home	1		005	60266 E Greystone Dr	2003/02/28
Private Resident Home	1		080	60461 E Black Crest Lp	2003/03/01
Private Resident Home	1		059	39785 S Buena Vista Dr	2003/03/05
Private Resident Home	1		006	60252 E Greystone Dr	2003/03/06
Private Resident Home	1		087	60559 E Black Crest Lp	2003/03/13
Private Resident Home	1		100	60464 E Black Crest Lp	2003/03/14
Private Resident Home	1		057	39813 S Buena Vista Dr	2003/03/18
Private Resident Home	1		104	60408 E Black Crest Lp	2003/03/20
Private Resident Home	1		094	60594 E Black Crest Lp	2003/03/24
Private Resident Home	1		096	60590 E Black Crest Lp	2003/03/24
Private Resident Home	1		095	60592 E Black Crest Lp	2003/03/28
Private Resident Home	1		032	60133 E Crestview Ct	2003/04/01
Private Resident Home	1		082	60489 E Black Crest Lp	2003/04/08
Private Resident Home	1		071	60335 E Black Crest Lp	2003/04/30
Private Resident Home	1		027	60148 E Crestview Ct	2003/05/06
Private Resident Home	1		101	60450 E Black Crest Lp	2003/05/08
Private Resident Home	1		089	60587 E Black Crest Lp	2003/05/09
Private Resident Home	1		060	39771 S Buena Vista Dr	2003/05/13
Private Resident Home	1		007	60238 E Greystone Dr	2003/05/21
Private Resident Home	1		081	60475 E Black Crest Lp	2003/05/22
Private Resident Home	1		201	60926 E Eagle Heights Dr	2003/05/27
Private Resident Home	1		099	60478 E Black Crest Lp	2003/05/28

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Private Resident Home	1		001	39555 S Greystone Ct	2003/06/02
Private Resident Home	1		024	60196 E Crestview Ct	2003/06/02
Private Resident Home	1		064	39715 S Buena Vista Dr	2003/06/03
Private Resident Home	1		148	40146 S Mountain Shadow Dr	2003/06/03
Private Resident Home	1		062	39743 S Buena Vista Dr	2003/06/06
Private Resident Home	1		200	60944 E Eagle Heights Dr	2003/06/11
Private Resident Home	1		135	60971 E Eagle Heights Dr	2003/06/21
Private Resident Home	1		194	60960 E Rock Ledge Lp	2003/06/23
Private Resident Home	1		168	60877 E Rock Ledge Lp	2003/06/24
Private Resident Home	1		002	39573 S Greystone Ct	2003/06/30
Private Resident Home	1		056	39827 S Buena Vista Dr	2003/07/01
Private Resident Home	1		044	60127 E Verde Vista Ct	2003/07/03
Private Resident Home	1		058	39799 S Buena Vista Dr	2003/07/07
Private Resident Home	1		150	40131 S Mountain Shadow Dr	2003/07/07
Private Resident Home	1		166	60865 E Rock Ledge Lp	2003/07/10
Private Resident Home	1		065	39701 S Buena Vista Dr	2003/07/15
Private Resident Home	1		031	60117 E Crestview Ct	2003/08/01
Private Resident Home	1		169	60883 E Rock Ledge Lp	2003/08/01
Private Resident Home	1		192	60948 E Rock Ledge Lp	2003/08/01
Private Resident Home	1		183	60834 E Rock Ledge Lp	2003/08/05
Private Resident Home	1		030	60100 E Crestview Ct	2003/08/06
Private Resident Home	1		010	60177 E Greystone Dr	2003/08/07
Private Resident Home	1		205	60854 E Eagle Heights Dr	2003/08/21
Private Resident Home	1		170	60889 E Rock Ledge Lp	2003/08/26
Private Resident Home	1		184	60840 E Rock Ledge Lp	2003/08/26
Private Resident Home	1		202	60908 E Eagle Heights Dr	2003/08/26
Private Resident Home	1		127	60827 E Eagle Heights Dr	2003/08/29
Private Resident Home	1		066	39687 S Buena Vista Dr	2003/09/02
Private Resident Home	1		106	60380 E Black Crest Lp	2003/09/02
Private Resident Home	1		126	60809 E Eagle Heights Dr	2003/09/03
Private Resident Home	1		042	60134 E Verde Vista Ct	2003/09/04
Private Resident Home	1		132	60917 E Eagle Heights Dr	2003/09/05
Private Resident Home	1		055	39841 S Buena Vista Dr	2003/09/08
Private Resident Home	1		069	60331 E Black Crest Lp	2003/09/08
Private Resident Home	1		180	60949 E Rock Ledge Lp	2003/09/08
Private Resident Home	1		171	60895 E Rock Ledge Lp	2003/09/10
Private Resident Home	1		072	60349 E Black Crest Lp	2003/09/11
Private Resident Home	1		137	61007 E Eagle Heights Dr	2003/09/11
Private Resident Home	1		191	60942 E Rock Ledge Lp	2003/09/11
Private Resident Home	1		003	39591 S Greystone Ct	2003/09/15
Private Resident Home	1		172	60901 E Rock Ledge Lp	2003/09/18
Private Resident Home	1		041	60150 E Verde Vista Ct	2003/09/22
Private Resident Home	1		068	60329 E Black Crest Lp	2003/09/25
Private Resident Home	1		120	60701 E Eagle Heights Dr	2003/09/29
Private Resident Home	1		040	60166 E Verde Vista Ct	2003/10/01
Private Resident Home	1		149	40151 S Mountain Shadow Dr	2003/10/01
Private Resident Home	1		207	60818 E Eagle Heights Dr	2003/10/02
Private Resident Home	1		147	40126 S Mountain Shadow Dr	2003/10/09
Private Resident Home	1		204	60872 E Eagle Heights Dr	2003/10/10
Private Resident Home	1		124	60773 E Eagle Heights Dr	2003/10/15
Private Resident Home	1		139	61043 E Eagle Heights Dr	2003/10/20
Private Resident Home	1		134	60953 E Eagle Heights Dr	2003/10/22
Private Resident Home	1		178	60937 E Rock Ledge Lp	2003/11/07
Private Resident Home	1		097	60506 E Black Crest Lp	2003/11/12
Private Resident Home	1		103	60422 E Black Crest Lp	2003/11/12
Private Resident Home	1		206	60836 E Eagle Heights Dr	2003/11/13
Private Resident Home	1		208	60800 E Eagle Heights Dr	2003/11/13
Private Resident Home	1		193	60954 E Rock Ledge Lp	2003/11/14
Private Resident Home	1		136	60989 E Eagle Heights Dr	2003/11/20
Private Resident Home	1		122	60737 E Eagle Heights Dr	2003/11/24

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Private Resident Home	1		093	60595 E Black Crest Lp	2003/12/04
Private Resident Home	1		018	60115 E Timberline Ct	2003/12/10
Private Resident Home	1		088	60573 E Black Crest Lp	2003/12/10
Private Resident Home	1		121	60719 E Eagle Heights Dr	2003/12/10
Private Resident Home	1		162	60841 E Rock Ledge Lp	2003/12/18
Private Resident Home	1		086	60545 E Black Crest Lp	2003/12/22
Private Resident Home	1		092	60593 E Black Crest Lp	2003/12/22
Private Resident Home	1		091	60591 E Black Crest Lp	2003/12/29
Private Resident Home	1		177	60931 E Rock Ledge Lp	2003/12/29
TOTAL 2003 Lots					103
Private Resident Home	1		116	40164 S Ridgeline Ct	2004/01/08
Private Resident Home	1		034	60163 E Crestview Ct	2004/01/14
Private Resident Home	1		197	60998 E Eagle Heights Dr	2004/01/21
Private Resident Home	1		198	60980 E Eagle Heights Dr	2004/01/21
Private Resident Home	1		102	60436 E Black Crest Lp	2004/01/22
Private Resident Home	1		179	60943 E Rock Ledge Lp	2004/01/26
Private Resident Home	1		043	60118 E Verde Vista Ct	2004/01/27
Private Resident Home	1		105	60394 E Black Crest Lp	2004/01/27
Private Resident Home	1		049	60207 E Verde Vista Ct	2004/02/02
Private Resident Home	1		182	60961 E Rock Ledge Lp	2004/02/02
Private Resident Home	1		161	60835 E Rock Ledge Lp	2004/02/03
Private Resident Home	1		181	60955 E Rock Ledge Lp	2004/02/03
Private Resident Home	1		151	40111 S Mountain Shadow Dr	2004/02/05
Private Resident Home	1		048	60191 E Verde Vista Ct	2004/02/10
Private Resident Home	1		045	60143 E Verde Vista Ct	2004/02/16
Private Resident Home	1		113	40100 S Ridgeline Ct	2004/02/18
Private Resident Home	1		070	60333 E Black Crest Lp	2004/02/24
Private Resident Home	1		211	60746 E Eagle Heights Dr	2004/02/24
Private Resident Home	1		047	60175 E Verde Vista Ct	2004/02/25
Private Resident Home	1		152	40091 S Mountain Shadow Dr	2004/02/26
Private Resident Home	1		090	60589 E Black Crest Lp	2004/03/01
Private Resident Home	1		146	40106 S Mountain Shadow Dr	2004/03/01
Private Resident Home	1		173	60907 E Rock Ledge Lp	2004/03/01
Private Resident Home	1		111	60621 E Eagle Heights Dr	2004/03/05
Private Resident Home	1		117	40153 S Ridgeline Ct	2004/03/05
Private Resident Home	1		119	60683 E Eagle Heights Dr	2004/03/10
Private Resident Home	1		153	40071 S Mountain Shadow Dr	2004/03/10
Private Resident Home	1		123	60755 E Eagle Heights Dr	2004/03/11
Private Resident Home	1		133	60935 E Eagle Heights Dr	2004/03/12
Private Resident Home	1		167	60871 E Rock Ledge Lp	2004/03/15
Private Resident Home	1		175	60919 E Rock Ledge Lp	2004/03/15
Private Resident Home	1		114	40132 S Ridgeline Ct	2004/03/16
Private Resident Home	1		128	60845 E Eagle Heights Dr	2004/03/17
Private Resident Home	1		115	40148 S Ridgeline Ct	2004/03/18
Private Resident Home	1		125	60791 E Eagle Heights Dr	2004/03/18
Private Resident Home	1		216	60656 E Eagle Heights Dr	2004/03/22
Private Resident Home	1		112	60639 E Eagle Heights Dr	2004/03/23
Private Resident Home	1		051	60239 E Verde Vista Ct	2004/03/24
Private Resident Home	1		185	60846 E Rock Ledge Lp	2004/03/25
Private Resident Home	1		046	60159 E Verde Vista Ct	2004/03/26
Private Resident Home	1		118	40143 S Ridgeline Ct	2004/03/26
Private Resident Home	1		217	60638 E Eagle Heights Dr	2004/03/29
Private Resident Home	1		076	60405 E Black Crest Lp	2004/04/01
Private Resident Home	1		188	60870 E Rock Ledge Lp	2004/04/01
Private Resident Home	1		209	60782 E Eagle Heights Dr	2004/04/01
Private Resident Home	1		084	60517 E Black Crest Lp	2004/04/05
Private Resident Home	1		163	60847 E Rock Ledge Lp	2004/04/06
Private Resident Home	1		186	60852 E Rock Ledge Lp	2004/04/16
Private Resident Home	1		187	60852 E Rock Ledge Lp	2004/04/19
Private Resident Home	1		004	39609 S Greystone Ct	2004/04/20
Private Resident Home	1		052	60255 E Verde Vista Ct	2004/04/22
Private Resident Home	1		164	60853 E Rock Ledge Lp	2004/04/22
Private Resident Home	1		039	60182 E Verde Vista Ct	2004/04/23
Private Resident Home	1		108	60466 E Eagle Heights Dr	2004/04/27
Private Resident Home	1		203	60890 E Eagle Heights Dr	2004/04/27

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Private Resident Home	1		053	60271 E Verde Vista Ct	2004/05/03
Private Resident Home	1		189	60930 E Rock Ledge Lp	2004/05/05
Private Resident Home	1		131	60899 E Eagle Heights Dr	2004/05/18
Private Resident Home	1		144	40066 S Mountain Shadow Dr	2004/05/24
Private Resident Home	1		218	60620 E Eagle Heights Dr	2004/05/24
Private Resident Home	1		019	60131 E Timberline Ct	2004/05/27
Private Resident Home	1		165	60859 E Rock Ledge Lp	2004/05/27
Private Resident Home	1		129	60863 E Eagle Heights Dr	2004/06/01
Private Resident Home	1		212	60728 E Eagle Heights Dr	2004/06/01
Private Resident Home	1		215	60674 E Eagle Heights Dr	2004/06/03
Private Resident Home	1		050	60223 E Verde Vista Ct	2004/06/04
Private Resident Home	1		190	60936 E Rock Ledge Lp	2004/06/07
Private Resident Home	1		021	60163 E Timberline Ct	2004/06/08
Private Resident Home	1		143	40046 S Mountain Shadow Dr	2004/06/18
Private Resident Home	1		038	60198 E Verde Vista Ct	2004/06/21
Private Resident Home	1		037	60214 E Verde Vista Ct	2004/06/23
Private Resident Home	1		085	60531 E Black Crest Lp	2004/07/06
Private Resident Home	1		054	39855 S Buena Vista Dr	2004/07/19
Private Resident Home	1		176	60925 E Rock Ledge Lp	2004/08/03
Private Resident Home	1		174	60913 E Rock Ledge Lp	2004/08/18
TOTAL 2004 Lots					75
Private Resident Home	1		145	40086 S Mountain Shadow Dr	2005/03/01
Private Resident Home	1		142	40026 S Mountain Shadow Dr	2005/03/03
Private Resident Home	1		195	39930 S Mountain Shadow Dr	2005/04/08
Private Resident Home	1		016	60164 E Timberline Ct	2005/05/19
Private Resident Home	1		196	39956 S Mountain Shadow Dr	2005/06/17
Private Resident Home	1		154	40051 S Mountain Shadow Dr	2005/08/05
TOTAL 2005 Lots					6
Private Resident Home	1		141	40006 S Mountain Shadow Dr	2006/08/28 was Open Lot
Private Resident Home	1		140	39986 S Mountain Shadow Dr	2006/09/18 was Open Lot
TOTAL 2006 Lots					2
Private Resident Home	1		160	39931 S Mountain Shadow Dr	2007/12/21 Model Parking Lot
Private Resident Home	1		155	40031 S Mountain Shadow Dr	2005/06/28 Model-sold
Private Resident Home	1		156	40011 S Mountain Shadow Dr	2006/02/13 Model-sold
Private Resident Home	1		157	39991 S Mountain Shadow Dr	2006/03/28 Model-sold
Private Resident Home	1		158	39971 S Mountain Shadow Dr	2006/02/22 Model-sold
Private Resident Home	1		159	39951 S Mountain Shadow Dr	2007/12/28 Model-sold
Private Resident Home	1		074	60377 E Black Crest Lp	2002/09**EST
Private Resident Home	1		098	60492 E Black Crest Lp	2003/03**EST
Private Resident Home	1		138	61025 E Eagle Heights Dr	2003/09**EST
TOTAL LOTS		218	0		

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Phase II Lots 219-377					
Private Residential Home	1		299	39641 S Old Arena Dr	2004/07/12
Private Residential Home	1		233	60316 E Old Spur Pl	2004/07/15
Private Residential Home	1		223	60389 E Alpine Wy	2004/07/20
Private Residential Home	1		219	60318 E Alpine Wy	2004/07/26
Private Residential Home	1		232	60338 E Old Spur Pl	2004/07/26
Private Residential Home	1		230	60370 E Old Spur Pl	2004/08/01
Private Residential Home	1		229	60386 E Old Spur Pl	2004/08/05
Private Residential Home	1		221	60354 E Alpine Wy	2004/08/10
Private Residential Home	1		231	60354 E Old Spur Pl	2004/08/18
Private Residential Home	1		371	39639 S Mountain Shadow Dr	2004/08/25
Private Residential Home	1		227	60367 E Alpine Wy	2004/09/01
Private Residential Home	1		226	60345 E Alpine Wy	2004/09/10
Private Residential Home	1		297	39671 S Old Arena Dr	2004/09/16
Private Residential Home	1		362	39648 S Mountain Shadow Dr	2004/09/16
Private Residential Home	1		300	39625 S Old Arena Dr	2004/09/17
Private Residential Home	1		368	39705 S Mountain Shadow Dr	2004/09/17
Private Residential Home	1		225	60327 E Alpine Wy	2004/09/23
Private Residential Home	1		301	39609 S Old Arena Dr	2004/10/01
Private Residential Home	1		224	60309 E Alpine Wy	2004/10/04
Private Residential Home	1		222	60370 E Alpine Wy	2004/10/07
Private Residential Home	1		234	60315 E Old Spur Pl	2004/10/12
Private Residential Home	1		369	39683 S Mountain Shadow Dr	2004/10/12
Private Residential Home	1		237	39642 S Old Arena Dr	2004/10/15
Private Residential Home	1		238	39656 S Old Arena Dr	2004/10/15
Private Residential Home	1		363	39606 S Mountain Shadow Dr	2004/10/15
Private Residential Home	1		293	39733 S Old Arena Dr	2004/10/18
Private Residential Home	1		240	39688 S Old Arena Dr	2004/10/22
Private Residential Home	1		239	39672 S Old Arena Dr	2004/10/26
Private Residential Home	1		302	39595 S Old Arena Dr	2004/10/28
Private Residential Home	1		235	60337 E Old Spur Pl	2004/10/29
Private Residential Home	1		236	60353 E Old Spur Pl	2004/11/01
Private Residential Home	1		370	39661 S Mountain Shadow Dr	2004/11/05
Private Residential Home	1		248	60305 E Loose Reins Pl	2004/11/08
Private Residential Home	1		247	60306 E Loose Reins Pl	2004/11/10
Private Residential Home	1		249	60321 E Loose Reins Pl	2004/11/15
Private Residential Home	1		298	39655 S Old Arena Dr	2004/11/15
Private Residential Home	1		372	39617 S Mountain Shadow Dr	2004/11/15
Private Residential Home	1		295	39701 S Old Arena Dr	2004/11/17
Private Residential Home	1		220	60336 E Alpine Wy	2004/11/18
Private Residential Home	1		241	60402 E Loose Reins Pl	2004/11/18
Private Residential Home	1		251	60353 E Loose Reins Pl	2004/11/23
Private Residential Home	1		246	60322 E Loose Reins Pl	2004/11/29
Private Residential Home	1		286	39847 S Old Arena Dr	2004/11/29
Private Residential Home	1		375	39551 S Mountain Shadow Dr	2004/11/29
Private Residential Home	1		376	39529 S Mountain Shadow Dr	2004/12/02
Private Residential Home	1		316	39980 S Horse Run Dr	2004/12/03
Private Residential Home	1		374	39573 S Mountain Shadow Dr	2004/12/03
Private Residential Home	1		242	60386 E Loose Reins Pl	2004/12/06
Private Residential Home	1		256	39808 S Old Arena Dr	2004/12/14
Private Residential Home	1		250	60337 E Loose Reins Pl	2004/12/15
Private Residential Home	1		285	39863 S Old Arena Dr	2004/12/17
Private Residential Home	1		252	60369 E Loose Reins Pl	2004/12/20
Private Residential Home	1		365	39530 S Mountain Shadow Dr	2004/12/20
Private Residential Home	1		355	60578 E Broken Bit Pl	2004/12/21
Private Residential Home	1		255	39794 S Old Arena Dr	2004/12/22
Private Residential Home	1		294	39717 S Old Arena Dr	2004/12/22
Private Residential Home	1		228	60390 E Alpine Wy	2004/12/23
Private Residential Home	1		287	39833 S Old Arena Dr	2004/12/27
Private Residential Home	1		243	60368 E Loose Reins Pl	2004/12/28
Private Residential Home	1		245	60336 E Loose Reins Pl	2004/12/28
Private Residential Home	1		357	39738 S Mountain Shadow Dr	2004/12/30
TOTAL 2004 Lots					61

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Private Residential Home	1		292	39755 S Old Arena Dr	2005/01/10
Private Residential Home	1		283	39893 S Old Arena Dr	2005/01/13
Private Residential Home	1		314	39940 S Horse Run Dr	2005/01/13
Private Residential Home	1		289	39801 S Old Arena Dr	2005/01/18
Private Residential Home	1		291	39771 S Old Arena Dr	2005/01/18
Private Residential Home	1		318	40020 S Horse Run Dr	2005/01/18
Private Residential Home	1		254	60403 E Loose Reins Pl	2005/01/19
Private Residential Home	1		296	39687 S Old Arena Dr	2005/01/25
Private Residential Home	1		278	39969 S Old Arena Dr	2005/01/26
Private Residential Home	1		284	39879 S Old Arena Dr	2005/01/26
Private Residential Home	1		288	39815 S Old Arena Dr	2005/01/26
Private Residential Home	1		253	60387 E Loose Reins Pl	2005/01/28
Private Residential Home	1		277	39985 S Old Arena Dr	2005/02/03
Private Residential Home	1		303	39997 S Horse Run Dr	2005/02/04
Private Residential Home	1		358	39716 S Mountain Shadow Dr	2005/02/07
Private Residential Home	1		257	39822 S Old Arena Dr	2005/02/08
Private Residential Home	1		272	39972 S Old Arena Dr	2005/02/09
Private Residential Home	1		320	39759 S Horse Run Dr	2005/02/09
Private Residential Home	1		244	60352 E Loose Reins Pl	2005/02/11
Private Residential Home	1		366	39508 S Mountain Shadow Dr	2005/02/11
Private Residential Home	1		304	39977 S Horse Run Dr	2005/02/19
Private Residential Home	1		346	60532 E Twisted Snaffle Pl	2005/02/19
Private Residential Home	1		276	40005 S Old Arena Dr	2005/02/22
Private Residential Home	1		377	39507 S Mountain Shadow Dr	2005/02/22
Private Residential Home	1		273	39986 S Old Arena Dr	2005/02/25
Private Residential Home	1		290	39785 S Old Arena Dr	2005/02/25
Private Residential Home	1		356	60584 E Broken Bit Pl	2005/03/09
Private Residential Home	1		325	39695 S Horse Run Dr	2005/03/10
Private Residential Home	1		328	39659 S Horse Run Dr	2005/03/11
Private Residential Home	1		373	39595 S Mountain Shadow Dr	2005/03/11
Private Residential Home	1		279	39955 S Old Arena Dr	2005/03/16
Private Residential Home	1		367	39727 S Mountain Shadow Dr	2005/03/17
Private Residential Home	1		332	39609 S Horse Run Dr	2005/03/21
Private Residential Home	1		275	40011 S Old Arena Dr	2005/03/29
Private Residential Home	1		347	60531 E Twisted Snaffle Pl	2005/03/29
Private Residential Home	1		282	39909 S Old Arena Dr	2005/04/01
Private Residential Home	1		344	60574 E Twisted Snaffle Pl	2005/04/05
Private Residential Home	1		360	39692 S Mountain Shadow Dr	2005/04/11
Private Residential Home	1		266	60359 E Verde Vista Ct	2005/04/15
Private Residential Home	1		268	39916 S Old Arena Dr	2005/04/15
Private Residential Home	1		281	39923 S Old Arena Dr	2005/04/15
Private Residential Home	1		271	39958 S Old Arena Dr	2005/04/18
Private Residential Home	1		274	40018 S Old Arena Dr	2005/04/20
Private Residential Home	1		331	39621 S Horse Run Dr	2005/04/22
Private Residential Home	1		307	39915 S Horse Run Dr	2005/04/29
Private Residential Home	1		364	39572 S Mountain Shadow Dr	2005/04/29
Private Residential Home	1		259	60362 E Verde Vista Ct	2005/05/05
Private Residential Home	1		269	39930 S Old Arena Dr	2005/05/06
Private Residential Home	1		270	39944 S Old Arena Dr	2005/05/06
Private Residential Home	1		280	39939 S Old Arena Dr	2005/05/10
Private Residential Home	1		342	39702 S Horse Run Dr	2005/05/16
Private Residential Home	1		326	39683 S Horse Run Dr	2005/05/19
Private Residential Home	1		322	39733 S Horse Run Dr	2005/05/24
Private Residential Home	1		267	60377 E Verde Vista Ct	2005/05/25
Private Residential Home	1		333	39614 S Horse Run Dr	2005/05/25
Private Residential Home	1		361	39682 S Mountain Shadow Dr	2005/05/26
Private Residential Home	1		258	60380 E Verde Vista Ct	2005/06/14
Private Residential Home	1		359	39704 S Mountain Shadow Dr	2005/06/14
Private Residential Home	1		343	39714 S Horse Run Dr	2005/06/17
Private Residential Home	1		327	39671 S Horse Run Dr	2005/07/19
Private Residential Home	1		329	39645 S Horse Run Dr	2005/08/09
Private Residential Home	1		351	60554 E Broken Bit Pl	2005/08/10
Private Residential Home	1		317	40000 S Horse Run Dr	2005/08/11
Private Residential Home	1		330	39633 S Horse Run Dr	2005/08/18

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Private Residential Home	1		324	39709 S Horse Run Dr	2005/09/01
Private Residential Home	1		312	39900 S Horse Run Dr	2005/09/12
Private Residential Home	1		350	39746 S Horse Run Dr	2005/09/14
Private Residential Home	1		315	39960 S Horse Run Dr	2005/10/04
Private Residential Home	1		310	39855 S Horse Run Dr	2005/10/12
Private Residential Home	1		339	39682 S Horse Run Dr	2005/10/24
Private Residential Home	1		348	60549 E Twisted Snaffle Pl	2005/10/25
Private Residential Home	1		309	39875 S Horse Run Dr	2005/10/28
Private Residential Home	1		341	39694 S Horse Run Dr	2005/10/28
Private Residential Home	1		354	60572 E Broken Bit Pl	2005/10/28
Private Residential Home	1		345	60550 E Twisted Snaffle Pl	2005/10/31
Private Residential Home	1		338	39674 S Horse Run Dr	2005/11/03
Private Residential Home	1		335	39638 S Horse Run Dr	2005/11/09
Private Residential Home	1		306	39935 S Horse Run Dr	2005/12/01
Private Residential Home	1		352	60560 E Broken Bit Pl	2005/12/07
Private Residential Home	1		305	39955 S Horse Run Dr	2005/12/09
Private Residential Home	1		311	39884 S Horse Run Dr	2005/12/09
Private Residential Home	1		321	39747 S Horse Run Dr	2005/12/13
Private Residential Home	1		323	39721 S Horse Run Dr	2005/12/13
Private Residential Home	1		313	39920 S Horse Run Dr	2005/12/14
Private Residential Home	1		308	39895 S Horse Run Dr	2005/12/20
Private Residential Home	1		340	39688 S Horse Run Dr	2005/12/20
Private Residential Home	1		349	39734 S Horse Run Dr	2005/12/29
TOTAL 2005 Lots					87
Private Residential Home	1		353	60566 E Broken Bit Pl	2006/01/24
Private Residential Home	1		336	39650 S Horse Run Dr	2006/03/21
Private Residential Home	1		337	39662 S Horse Run Dr	2006/03/30
Private Residential Home	1		334	39626 S Horse Run Dr	2006/03/31
Private Residential Home	1		319	40040 S Horse Run Dr	2006/05/25
Private Residential Home	1		265	60341 E Verde Vista Ct	2006/09/22
TOTAL 2006 Lots					6
Private Residential Home	1		260	60344 E Verde Vista Ct	2008/06/20(model)
TOTAL 2008 Lots					1
D R Horton	1		261	60332 E Verde Vista Ct	model
D R Horton	1		262	60320 E Verde Vista Ct	model
D R Horton	1		263	60308 E Verde Vista Ct	model
D R Horton		1	264	60323 E Verde Vista Ct	model parking lot
TOTAL LOTS		158	1		



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
 CERTIFICATE OF APPROVAL TO CONSTRUCT
 WATER FACILITIES

A10

MAY 27 2004

Page 1 Of 2

ADEQ File No: 20040238	
System Name: Goodman Water Co	System Number: 11130
Project Owner: D.R. Horton	
Address: 5255 E. Williams Cir., #1030, Tucson, AZ 85711	
Project Location: Catalina	County: Pinal
Description: BOOSTER STATION UPGRADES TO PROVIDE FOR A FIRE FLOW OF 1500 GPM AND TOTAL SUPPLY OF 1600 GPM AT THE EAGLE CREST WATER PLANT #4.	

Approval to construct the above-described facilities as represented in the approved documents on file with the Arizona Department of Environmental Quality is hereby given subject to provisions 1 through 5 continued on page 2 through 2

1. This project must be constructed in accordance with all applicable laws, including Title 49, Chapter 2, Article 9 of the Arizona Revised Statutes and Title 18, Chapter 4, Article 5 of the Arizona Administrative Code.
2. Upon completion of construction, the engineer shall fill out the Engineer's Certificate of Completion and forward it to the Central Regional Office located in Phoenix. If all requirements have been completed, that unit will issue a Certificate of Approval of Construction. R18-4-507(B), Ariz. Admin. Code. At the project owner's request, the Department may conduct the final inspection required pursuant to R18-4-507(B); such a request must be made in writing in accordance with the time requirements of R18-4-507(C), Ariz. Admin. Code.
3. This certificate will be void if construction has not started within one year after the Certificate of Approval to Construct is issued, there is a halt in construction of more than one year, or construction is not completed within three years of the approval date. Upon receipt of a written request for an extension of time, the Department may grant an extension of time; an extension of time must be in writing. R18-4-505(E), Ariz. Admin. Code.
4. Operation of a newly constructed facility shall not begin until a Certificate of Approval of Construction has been issued by the Department. R18-4-507(A), Ariz. Admin. Code.

Reviewed by JD1

By: Aolad Hossain 5/20/04
 Aolad Hossain, P.E., Manager Date
 Technical Engineering Unit
 Water Quality Division

cc: File No: 20040238
 Regional Office: Central
 Owner: D.R. Horton
 County Health Department: Pinal
 Engineer: Westland Resources
 Planning and Zoning/Az Corp. Commission
 Engineering Review Database - Etr021

A10

**CERTIFICATE OF APPROVAL TO CONSTRUCT
WATER FACILITIES**

ADEQ File No. 20040238

Page 2 of 2 : Provisions, continued

5. Pipes, fittings, valves, and any other material that comes in contact with drinking water shall comply with NSF Standard 61.

A10



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 W. Washington Street Phoenix, Arizona 85007

29202

APPROVAL OF CONSTRUCTION

Project Description: Booster station upgrades to provide a fireflow of 1500 gpm and total flow of 1600 gpm at the Eagle Crest Water Plant No. 4.

Location: Catalina, Pinal County

Project Owner: Goodman Water Company

Address: 5255 East Williams Circle, #1030, Tucson, Arizona 85711

Arizona Department of Environmental Quality (ADEQ) hereby issues an Approval of Construction for the above-described facility based on the following provisions of Arizona Administrative Code (A.A.C.) R18-4-507 et seq.

On May 26, 2004, ADEQ issued a Certificate of Approval to Construct for the referenced project.

On August 31, 2004, Kara D. Festa, P.E., certified the following:

- a final construction inspection was conducted on August 3, 2004;
- the referenced project was constructed according to the as-built and approved plans and specifications and ADEQ's Certificate of Approval to Construct;
- water system pressure and leakage tests were conducted on August 20, 2004 and the results were within the allowable leakage rates; and
- the system was disinfected according to an ADEQ-approved method.

Microbiological sample from the new piping was analyzed by Turner Laboratories, Inc., ADHS #AZ0066, on July 30, 2004. The sample result was negative for total coliform.

This Approval of Construction authorizes the owner to begin operating the above-described facilities as represented in the approved plan on file with the ADEQ. Be advised that A.A.C. R18-4-124 requires the owner of a public water system to maintain and operate all water production, treatment and distribution facilities in accordance with ADEQ Safe Drinking Water Rules.

jdl

PWS No.: 11-130

ADEQ Project No.: 20040238

LTF No.: 33904

Phoenix K. Quinn
FOR

10/12/04
Date Approved

Technical Engineering Unit
Drinking Water Section

c: DWCEU Facility File
TEU Construction File
CRO Approval of Construction File
Pinal County Health Department
Pinal County Planning & Zoning Department
AZ Corporation Commission
Engineer

Northern Regional Office
1515 East Cedar Avenue • Suite F • Flagstaff, AZ 86004
(520) 779-0313

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

(All)

GOLDER RANCH FIRE DISTRICT

Community Risk Prevention Division

Helping to make our community a better, safer place to live!



September 2003

Jim Morrison, Vice President Construction
D.R. Horton Homes
5255 E. Williams Circle
Suite 1030
Tucson, Arizona 85711

RE: Fire Code Review of Eagle Crest Ranch Development

Dear Mr. Morrison,

There have been recent discussions regarding some Fire Code deficiencies within the Eagle Crest Ranch Development. It is my intention to strive for fire code compliance and continue the good relations between Golder Ranch Fire District and D.R. Horton Homes. The two main issues at hand are as follows; fire flow requirements in relation to dwelling unit square footage, insufficient emergency secondary access. On the final plat for phase 2, I have also identified a concern regarding access for two separate cul-de-sacs with over 25 dwelling units each.

* I. Fire Flow

- A. **UFC Appendix III-A / IFC Appendix B – Section 5.1 One- and Two-Family Dwellings** - The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire area which does not exceed 3,600 square feet shall be 1,000 gallons per minute. Fire flow and flow duration for dwellings having a fire area in excess of 3,600 square feet shall not be less than that specified in UFC Table A-III-A-1. **Exception** – A reduction of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.
- B. **UFC Appendix III-A – Section 4 Fire Area** - Defined as the total floor area of all floor levels within the exterior walls, and under horizontal projections of a roof of a building except as modified in Section 4. **Area Separation** – Portions of a building which are separated by one or more four-hour area separation walls constructed in accordance with the Building Code, without openings and provided with a 30-inch parapet, are allowed to be considered as separate fire areas.
- C. **Horizontal Projections of a Roof** – GRFD interpretation and clarification with the latest editions of the fire code - Covered patios and porches that are not open on two or more sides are also considered as Fire Area for defining fire flow requirements.
- D. **Garages** – Garages are included as Fire Area for defining fire flow requirements.
- E. **Fire Area Exceeding 3,600 Square Feet** – The next step in Table A-III-A-1 is 1,750 gallons per minute for buildings not exceeding 4,800 square feet.

GOLDER RANCH FIRE DISTRICT

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- F. **Water Development Plans** – The approved Water Development Plans were approved for 1,000 gpm fire flow and have notation that dwelling units exceeding 3,600 square feet in fire area shall have an automatic fire sprinkler system installed.
- * G. **Situation** – The “*Kopopelli*” model consists of 3,682 square feet plus a 652 square foot garage and covered porches/patios open on two or more sides for a total of 4,334 square feet fire area. The “*Windsong*” model consists of 2,998 square feet plus a 676 square foot garage and covered porches/patios open on two or more sides for a total of 3,674 square feet fire area. Both of these models exceed 3,600 square feet and are required to have an automatic sprinkler system installed. D.R. Horton Homes has constructed and completed five (5) dwelling units that exceed 3,600 square feet in fire area, lots 147, 157, 162, 166, and 191. An automatic fire sprinkler system has not been installed in these dwelling units. A sixth dwelling unit exceeding 3,600 square feet is currently under construction, lot 193. An approved automatic sprinkler system has been installed for lot 193. Future lots might be sold and built upon with dwelling units exceeding 3,600 square feet.
- * H. **Proposed Solution** – Jim Morrison, D.R. Horton Homes, has expressed the desire of D.R. Horton Homes to not have to install automatic sprinkler systems in the homes exceeding 3,600 square feet and has proposed to increase the available fire flow to 1,500 gallons per minute. Westland Resources has modeled the existing water system and submitted documentation that the system could handle an increase of 500 gpm.
- I. Dwelling units exceeding 3,600 square feet but not exceeding 4,800 square feet would require 1,750 gpm by Table A-III-A-1. Chief Fink and Fire Marshal Schoon have reviewed the situation, and due to an overall 500 gpm improvement for the entire development, agreed to allow the dwelling units to be constructed up to 4,800 in fire area, if 1,500 gpm is available.

(A11)

GOLDER RANCH FIRE DISTRICT

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II. Secondary Access

- A. **UFC 1998 Supplement / IFC Appendix D**– Planned Area Developments where the number of dwelling units exceeds 25 shall be provided with separate and approved fire apparatus access roads. Exception – Where all dwelling units are protected by approved automatic sprinkler systems, access from two directions shall not be required. **Section 503.1.2 Additional access.** The code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
- B. **Situation** - The Development Plan was shown with two main access points; these being from Oracle Road onto Eagle Crest Boulevard, and from SaddleBrooke Boulevard onto Eagle Crest Boulevard. The SaddleBrooke Boulevard access point would not be installed until such time that the commercial properties on the Northwest corner of the development were started. The development has more than 500 dwelling units planned. The majority of dwelling units were further identified to be accessible from a single main roadway, Eagle Heights Drive. The developer agreed to install a secondary access point adjacent to lot 148 that leads to Edwin Road and it would be gated to allow for emergency use only. Any locking mechanism shall be approved by GRFD and adhere to the standard for approved key boxes of locking mechanisms. The required unobstructed width of fire apparatus access roads is 20 feet. The standard for emergency fire apparatus roads is 14 feet.
- C. **Problem** – The secondary access has been completed. The gate is currently not locked. The gate is obstructed by a three foot high dirt and rock barrier placed between Edwin Road and the gate. The gate width is 14 feet; however, the access consistently narrows down to 9 feet wide as it meets with the development roadway adjacent to lot 148. This secondary access is unusable and does not meet the standard.
- D. **Solution** – Correct the width deficiency, remove the dirt and rock barrier, and install a Knox Lock. A Knox Lock Form will be provided.

GOLDER RANCH FIRE DISTRICT

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III. Long, Dead-End Roads with Single Point of Access

- A. **UFC 1998 Supplement / IFC Appendix D** – Developments of one- or two family dwellings where the number of dwelling units exceeds 30 shall be provided with a minimum of two separate and approved fire apparatus access roads. **Exception:** Where all dwelling units are protected by approved residential sprinkler systems, access from two directions may not be required. **Section 503.1.2 Additional Access.** The code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
- B. **Situation** – The latest Final Plat GRFD has reviewed shows two long dead-end cul-de-sacs with a single point of access for each one. One of these roadways, Diamond Bay Drive, serves 104 lots and the other, Mountain Shadow Drive, serves 45 lots.
- C. **Solution** - A second means of access shall be provided for each area or all dwelling units on these two points of access shall be constructed with an approved automatic sprinkler system.

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GOLDER RANCH FIRE DISTRICT

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June 28, 2004

Leslie Schaefer
D R Horton
5255 E. Williams Circle
Suite 1030
Tucson, AZ 85711

RE: Eagle Crest Ranch, Phase III (Lots 378-419)

Dear MS. Schaefer,

I received your letter describing the road widths and possibly increasing the fire flow to 1,500 gpm in lieu of the required installation of automatic sprinkler systems. The road widths stated are minimum widths and as such do not offer anything to consider in the way of not enforcing the fire code with an alternative method. Your letter was bold enough to suggest that emergency apparatus could utilize a 10' right of way on both sides and illustrated it as a "clear area." With the installation of mailboxes, landscaping, and vehicles of homeowners parked in their driveways, I certainly can not see this as a "clear area."

* D R Horton has stated in October 2003 they would increase the fire flow to 1,500 gpm because of constructing dwellings exceeding 3,600 square feet. The Fire Code requirement is 1,750 gpm for dwellings exceeding 3,600 square feet. GRFD agreed to accept an increase to 1,500 gpm for dwellings up to but not exceeding 4,800 square feet. As of June 2004, the improvements have not been accomplished.

Furthermore, the entire development is served by a single access point. An emergency secondary access was constructed in the cul-de-sac of Mountain Shadows Drive to meet the Fire Code. The Fire Code requires minimum clear width of 20 feet. GRFD agreed to accept a 14 foot clear width for the relatively short distance between Mountain Shadows Drive and Edwin Road. The developer constructed an access that is only 9 feet wide with one side having a vertical drop off into a drainage area. The access can not be utilized by fire apparatus. In the October 2003 meeting with D R Horton and GRFD, this was pointed out and was also to be corrected. As of June 2004, the access has not been corrected.

Increasing the available fire flow to 1,500 gpm, and correcting the existing secondary access is paramount to the continuation of this development. Golder Ranch Fire District has been patient and obviously willing to work with D R Horton; however, D R Horton has not been responsive to correcting the deficiencies. Lots 378-419 do require without exception, an additional secondary access or the installation of an automatic sprinkler system in each dwelling.

Sincerely,

Steven L. Schoon
Fire Marshal

Street Name	Street	Lot	House Type	Sprinkler System		Water	Fire	Building	House	
	Address	Number	K or W	YES	NO	Meter	Zone	Phase	Count	
S Mountain Shadow Dr	40046	143	K		X	5/8"	J	I	1	
	40126	147	K		X	5/8"	J	I	1	
	40146	148	W		X	5/8"	J	I	1	
	40051	154	K		X	5/8"	J	I	1	
	40031	155	K		X	5/8"	J	I	1	
	39991	157	K		X	5/8"	J	I	1	
	39692	360	K		X	5/8"	K	II-B	1	
	39682	361	W		X	5/8"	K	II-B	1	
	39572	364	K		X	5/8"	K	II-B	1	
	39683	369	K		X	5/8"	K	II-B	1	
	39661	370	K		X	5/8"	K	II-B	1	
	39508	366	W		X	5/8"	K	II-B	1	
	Fire Code-One Entrance St.	39484	419	W	X		3/4"	K	III-B	1
	Fire Code-One Entrance St.	39448	416	K	X		3/4"	K	III-B	1
	Fire Code-One Entrance St.	39424	414	K	X		1"	K	III-B	1
	Fire Code-One Entrance St.	39376	410	K	X		1"	K	III-B	1
	Fire Code-One Entrance St.	39316	406	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39280	403	W	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39268	402	K	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39256	401	W	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39244	400	W	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39232	399	K	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39249	394	K	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39327	388	K	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39371	384	W	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39413	381	K	X		3/4"	K	III-B	1	
Fire Code-One Entrance St.	39473	379	W	X		1"	K	III-B	1	
Rock Ledge Loop	60954	193	W		X	5/8"	K	I	1	
	60942	191	K		X	5/8"	K	I	1	
	60870	188	K		X	5/8"	K	I	1	
	60852	186	K		X	5/8"	K	I	1	
	60835	161	W		X	5/8"	K	I	1	
	60841	162	W		X	5/8"	K	I	1	
	60847	163	W		X	5/8"	K	I	1	
	60853	164	K		X	5/8"	K	I	1	
	60859	165	K		X	5/8"	K	I	1	
	60865	166	K		X	5/8"	K	I	1	
Eagle Mountain Dr	60825	591	K	X		3/4"	K	IV-B	1	
	60837	592	K	X		3/4"	K	IV-B	1	
	60889	596	K	X		3/4"	K	IV-B	1	
	60985	603	K	X		3/4"	K	IV-B Model	1	
	60902	611	K	X		3/4"	K	IV-B	1	
	60616	724	K	X		3/4"	K	IV-B	1	
Eagle Ridge Dr	60922	918	K	X		3/4"	K	V-B	1	
	60755	877	W	X		3/4"	K	V-B	1	
	60417	893	K	X		3/4"	K	V-B	1	
	60441	892	K	X		3/4"	K	V-B	1	
Running Roses Lane	39070	751	W	X		3/4"	J	V-A	1	
	39091	756	W	X		3/4"	J	V-A	1	
Quick Trot Dr	39136	867	W	X		3/4"	J	V-A Model	1	
House Type: K=Kopopelli 4,334 sq. ft. W=Windsong 3,674 sq. ft.										
TOTAL LARGE HOUSES									50	
Note: All houses in Phase IV-C require Fire Sprinkler due to Fire Code for One Entrance St.										

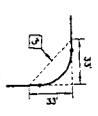
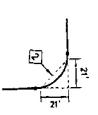
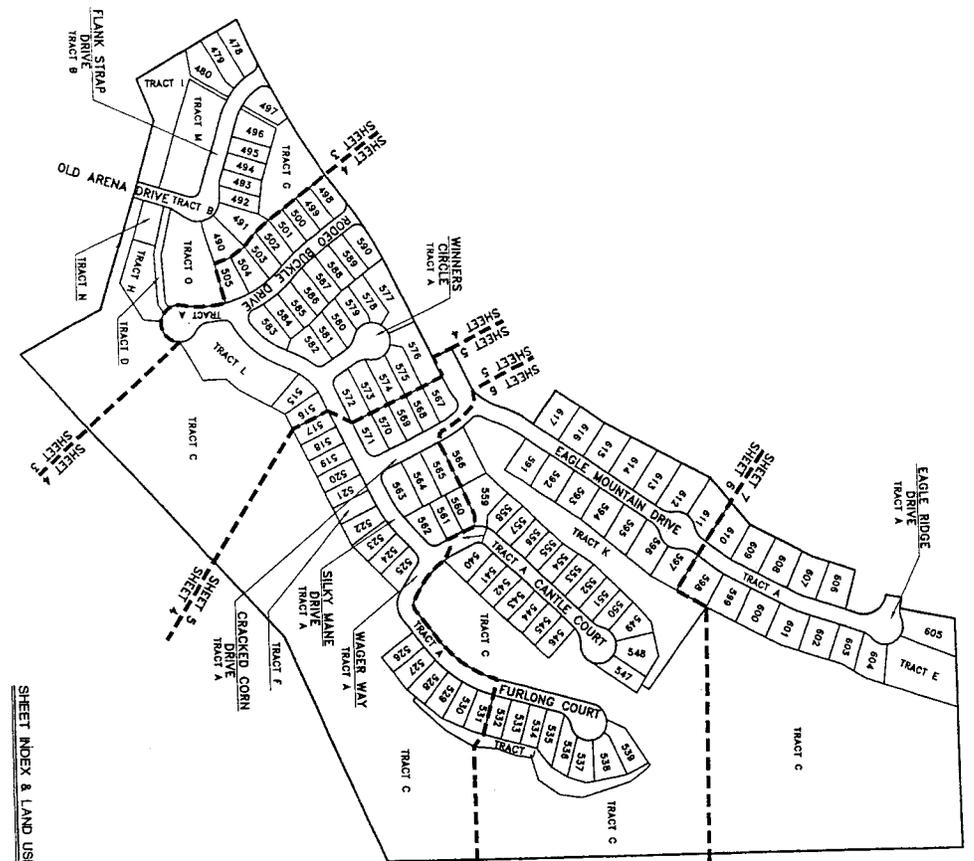
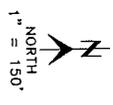
Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date		
PHASE III-A Lots 420-477							
Private residential Home	1		468	39527 S Old Arena Dr	2005/06/17		
Private residential Home	1		421	60467 E Alpine Way	2005/07/12		
Private residential Home	1		422	60483 E Alpine Way	2005/07/14		
Private residential Home	1		466	39503 S Old Arena Dr	2005/07/15		
Private residential Home	1		471	39504 S Starship Dr	2005/07/26		
Private residential Home	1		469	39528 S Starship Dr	2005/07/27		
Private residential Home	1		470	39516 S Starship Dr	2005/07/27		
Private residential Home	1		420	60451 E Apline Way	2005/08/01		
Private residential Home	1		426	39561 S Starship Dr	2005/08/04		
Private residential Home	1		423	60499 E Alpine Way	2005/08/05		
Private residential Home	1		427	39539 S Starship Dr	2005/08/05		
Private residential Home	1		472	39492 S Starship Dr	2005/08/05		
Private residential Home	1		425	60531 E Alpine Way	2005/08/09		
Private residential Home	1		462	39443 S Old Arena Dr	2005/08/16		
Private residential Home	1		474	39432 S Starship Dr	2005/08/16		
Private residential Home	1		464	39479 S Old Arena Dr	2005/08/19		
Private residential Home	1		424	60515 E Alpine Way	2005/08/22		
Private residential Home	1		458	39395 S Old Arena Dr	2005/08/22		
Private residential Home	1		459	39407 S Old Arena Dr	2005/08/22		
Private residential Home	1		476	39408 S Starship Dr	2005/08/25		
Private residential Home	1		473	39462 S Starship Dr	2005/08/26		
Private residential Home	1		477	39396 S Starship Dr	2005/08/26		
Private residential Home	1		467	39515 S Old Arena Dr	2005/08/29		
Private residential Home	1		465	39491 S Old Arena Dr	2005/09/02		
Private residential Home	1		429	39495 S Starship Dr	2005/09/06		
Private residential Home	1		463	39455 S Old Arena Dr	2005/09/08		
Private residential Home	1		475	39420 S Starship Dr	2005/09/14		
Private residential Home	1		428	39517 S Starship Dr	2005/09/19		
Private residential Home	1		430	39496 S Cinch Strap Pl	2005/10/21		
Private residential Home	1		461	39431 S Old Arena Dr	2005/10/24		
Private residential Home	1		431	39514 S Cinch Strap Pl	2005/10/28		
Private residential Home	1		460	39419 S Old Arena Dr	2005/10/31		
Private residential Home	1		434	39568 S Cinch Strap Pl	2005/11/03		
Private residential Home	1		432	39532 S Cinch Strap Pl	2005/11/04		
Private residential Home	1		442	39461 S Cinch Strap Pl	2005/11/15		
Private residential Home	1		433	39550 S Cinch Strap Pl	2005/11/16		
Private residential Home	1		437	39551 S Cinch Strap Pl	2005/11/18		
Private residential Home	1		436	39569 S Cinch Strap Pl	2005/11/21		
Private residential Home	1		438	39533 S Cinch Strap Pl	2005/11/21		
Private residential Home	1		443	39443 S Cinch Strap Pl	2005/11/21		
Private residential Home	1		439	39515 S Cinch Strap Pl	2005/11/22		
Private residential Home	1		440	39497 S Cinch Strap Pl	2005/11/28		
Private residential Home	1		441	39479 S Cinch Strap Pl	2005/11/28		
Private residential Home	1		444	39425 S Cinch Strap Pl	2005/11/28		
Private residential Home	1		446	39389 S Cinch Strap Pl	2005/12/02		
Private residential Home	1		445	39407 S Cinch Strap Pl	2005/12/05		
Private residential Home	1		435	39587 S Cinch Strap Pl	2005/12/06		
Private residential Home	1		448	39355 S Old Arena Dr	2005/12/06		
Private residential Home	1		447	39371 S Cinch Strap Pl	2005/12/12		
Private residential Home	1		451	39343 S Old Arena Dr	2005/12/16		
Private residential Home	1		457	39352 S Old Arena Dr	2005/12/19		
Private residential Home	1		450	39347 S Old Arena Dr	2005/12/23		
Private residential Home	1		454	39331 S Old Arena Dr	2005/12/23		
Private residential Home	1		452	39339 S Old Arena Dr	2005/12/27		
Private residential Home	1		453	39335 S Old Arena Dr	2005/12/27		
Private residential Home	1		455	39344 S Old Arena Dr	2005/12/28		
Private residential Home	1		456	39348 S Old Arena Dr	2005/12/28		
Private residential Home	1		449	39351 S Old Arena Dr	2005/12/29		
TOTAL LOTS				58	0	TOTAL 2005 Lots	58

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Phase III Total Lots 378-477					
PHASE III-B Lots 378-419					
Private Resident Home	1		414	39424 S Mountain Shadow Dr	2005/08/17
Private Resident Home	1		415	39436 S Mountain Shadow Dr	2005/08/19
Private Resident Home	1		416	39448 S Mountain Shadow Dr	2005/08/22
Private Resident Home	1		382	39395 S Mountain Shadow Dr	2005/08/30
Private Resident Home	1		380	39435 S Mountain Shadow Dr	2005/09/01
Private Resident Home	1		378	39485 S Mountain Shadow Dr	2005/09/06
Private Resident Home	1		413	39412 S Mountain Shadow Dr	2005/09/06
Private Resident Home	1		379	39473 S Mountain Shadow Dr	2005/09/07
Private Resident Home	1		412	39400 S Mountain Shadow Dr	2005/11/07
Private Resident Home	1		383	39383 S Mountain Shadow Dr	2005/11/18
Private Resident Home	1		409	39352 S Mountain Shadow Dr	2005/12/16
Private Resident Home	1		381	39413 S Mountain Shadow Dr	2005/12/19
Private Resident Home	1		405	39304 S Mountain Shadow Dr	2005/12/19
Private Resident Home	1		410	39376 S Mountain Shadow Dr	2005/12/19
Private Resident Home	1		384	39371 S Mountain Shadow Dr	2005/12/23
TOTAL 2005 Lots					15
Private Resident Home	1		407	39328 S Mountain Shadow Dr	2006/01/11
Private Resident Home	1		385	39359 S Mountain Shadow Dr	2006/01/12
Private Resident Home	1		388	39327 S Mountain Shadow Dr	2006/01/30
Private Resident Home	1		411	39388 S Mountain Shadow Dr	2006/02/02
Private Resident Home	1		386	39349 S Mountain Shadow Dr	2006/02/03
Private Resident Home	1		387	39341 S Mountain Shadow Dr	2006/03/01
Private Resident Home	1		390	39299 S Mountain Shadow Dr	2006/03/03
Private Resident Home	1		391	39285 S Mountain Shadow Dr	2006/03/14
Private Resident Home	1		403	39280 S Mountain Shadow Dr	2006/03/14
Private Resident Home	1		404	39292 S Mountain Shadow Dr	2006/03/17
Private Resident Home	1		389	39311 S Mountain Shadow Dr	2006/03/20
Private Resident Home	1		402	39268 S Mountain Shadow Dr	2006/03/20
Private Resident Home	1		408	39340 S Mountain Shadow Dr	2006/03/22
Private Resident Home	1		406	39316 S Mountain Shadow Dr	2006/03/23
Private Resident Home	1		393	39261 S Mountain Shadow Dr	2006/05/24
Private Resident Home	1		392	39273 S Mountain Shadow Dr	2006/05/25
Private Resident Home	1		418	39472 S Mountain Shadow Dr	2006/06/05
Private Resident Home	1		417	39460 S Mountain Shadow Dr	2006/06/13
Private Resident Home	1		395	39237 S Mountain Shadow Dr	2006/06/30
Private Resident Home	1		399	39232 S Mountain Shadow Dr	2006/06/30
Private Resident Home	1		401	39256 S Mountain Shadow Dr	2006/06/30
Private Resident Home	1		400	39244 S Mountain Shadow Dr	2006/07/31
Private Resident Home	1		398	39220 S Mountain Shadow Dr	2006/08/15
Private Resident Home	1		394	39249 S Mountain Shadow Dr	2006/09/27
Private Resident Home	1		419	39484 S Mountain Shadow Dr	2006/09/27
Private Resident Home	1		396	39215 S Mountain Shadow Dr	2006/11/30
Private Resident Home	1		397	39208 S Mountain Shadow Dr	2006/12/06
TOTAL 2006 Lots					27
TOTAL LOTS:		42	0		

P16

RECORDING DATA

	STATE OF ARIZONA, 1st 1/7
	COUNTY OF PINAL, 1005-1283572
I hereby certify that the within instrument is filed in the office, record of this County by me, the undersigned, on this 27th day of August, 2004.	
Record at 12:01 P.M.	
My Commission Expires 12/31/06	
WITNESSED BY ME, THE Pinal County Recorder	
BY: <i>W. H. Smith</i> Deputy	



TYPICAL SIGHT TRIANGLE VISIBILITY LOCAL TO LOCAL INTERSECTIONS

TYPICAL SIGHT TRIANGLE VISIBILITY COLLECTOR OR ARTERIAL INTERSECTIONS

TYPICAL SIGHT VISIBILITY TRIANGLE EASMENTS N.T.S.



OPW ENGINEERING, L.L.C.
 ENGINEERING SURVEYING & PLANNING
 17000 W. Greenway Road Suite 27
 Tucson, Arizona 85718
 (520) 298-8514

OPUS
 GPP Job No. 92004-406
 SHEET 2 OF 7

FINAL PLAT
EAGLE CREST
RANCH I/A
 LOTS 418-450, 453-500, AND 501-57

SHEET INDEX & LAND USE PLAN

Owner_Name	Built	Open Lot	lot #	Unit_Address	HOA Settle_Date
PHASE IV-A & IV-B					
Lots 478-480, 490-505, 515-617					
Private Resident Home	1		520	60839 E Silky Mane Dr	2007/05/09
Private Resident Home	1		521	60853 E Silky Mane Dr	2007/05/09
Private Resident Home	1		580	39096 S Winners Cir	2007/05/10
Private Resident Home	1		501	39142 S Rodeo Buckle Dr	2007/05/14
Private Resident Home	1		478	60527 E Flank Strap Dr	2007/05/15
Private Resident Home	1		516	60787 E Silky Mane Dr	2007/05/18
Private Resident Home	1		576	39061 S Winners Cir	2007/05/18
Private Resident Home	1		517	60801 E Silky Mane Dr	2007/05/21
Private Resident Home	1		582	39122 S Winners Cir	2007/05/21
Private Resident Home	1		491	60620 E Flank Strap Dr	2007/05/25
Private Resident Home	1		496	60560 E Flank Strap Dr	2007/05/25
Private Resident Home	1		573	39103 S Winners Cir	2007/05/25
Private Resident Home	1		519	60827 E Silky Mane Dr	2007/05/30
Private Resident Home	1		590	39107 S Rodeo Buckle Dr	2007/05/30
Private Resident Home	1		523	60891 E Silky Mane Dr	2007/06/13
Private Resident Home	1		581	39108 S Winners Cir	2007/06/15
Private Resident Home	1		567	39022 S Cracked Corn Dr	2007/06/21
Private Resident Home	1		494	60584 E Flank Strap Dr	2007/06/22
Private Resident Home	1		578	39072 S Winners Cir	2007/06/22
Private Resident Home	1		579	39084 S Winners Cir	2007/06/27
Private Resident Home	1		500	39130 S Rodeo Buckle Dr	2007/06/28
Private Resident Home	1		563	39079 S Cracked Corn Dr	2007/06/29
Private Resident Home	1		577	39058 S Winners Cir	2007/07/09
Private Resident Home	1		526	39051 S Furlong Ct	2007/07/16
Private Resident Home	1		503	39166 S Rodeo Buckle Dr	2007/07/18
Private Resident Home	1		515	60771 E Silky Mane Dr	2007/07/24
Private Resident Home	1		498	39106 S Rodeo Buckle Dr	2007/07/27
Private Resident Home	1		565	39045 S Cracked Corn Dr	2007/07/27
Private Resident Home	1		518	60813 E Silky Mane Dr	2007/07/31
Private Resident Home	1		568	39036 S Cracked Corn Dr	2007/07/31
Private Resident Home	1		569	39050 S Cracked Corn Dr	2007/07/31
Private Resident Home	1		566	39027 S Cracked Corn Dr	2007/08/02
Private Resident Home	1		574	39089 S Winners Cir	2007/08/15
Private Resident Home	1		522	60879 E Silky Mane Dr	2007/08/22
Private Resident Home	1		479	60533 E Flank Strap Dr	2007/08/28
Private Resident Home	1		480	60541 E Flank Strap Dr	2007/08/30
Private Resident Home	1		497	60534 E Flank Strap Dr	2007/08/30
Private Resident Home	1		527	39039 S Furlong Ct	2007/08/30
Private Resident Home	1		575	39075 S Winners Cir	2007/08/31
Private Resident Home	1		525	60915 E Silky Mane Dr	2007/09/11
Private Resident Home	1		528	39027 S Furlong Ct	2007/09/14
Private Resident Home	1		541	60923 E Cantle Ct	2007/09/14
Private Resident Home	1		588	39131 S Rodeo Buckle Dr	2007/09/17
Private Resident Home	1		558	60902 E Cantle Ct	2007/09/18
Private Resident Home	1		530	39003 S Furlong Ct	2007/09/20
Private Resident Home	1		542	60933 E Cantle Ct	2007/09/20
Private Resident Home	1		529	39015 S Furlong Ct	2007/09/26
Private Resident Home	1		571	39080 S Cracked Corn Dr	2007/09/27
Private Resident Home	1		492	60608 E Flank Strap Dr	2007/09/28
Private Resident Home	1		543	60943 E Cantle Ct	2007/09/28
Private Resident Home	1		544	60953 E Cantle Ct	2007/09/28
Private Resident Home	1		557	60916 E Cantle Ct	2007/09/28
Private Resident Home	1		586	39155 S Rodeo Buckle Dr	2007/09/28
Private Resident Home	1		589	39119 S Rodeo Buckle Dr	2007/09/28
Private Resident Home	1		559	39000 S Wager Way	2007/10/05
Private Resident Home	1		502	39154 S Rodeo Buckle Dr	2007/11/02
Private Resident Home	1		524	60903 E Silky Mane Dr	2007/11/29
Private Resident Home	1		587	39143 S Rodeo Buckle Dr	2007/12/10
Private Resident Home	1		560	39014 S Wager Way	2007/12/12
Private Resident Home	1		570	39064 S Cracked Corn Dr	2007/12/27
Private Resident Home	1		499	39118 S Rodeo Buckle Dr	2007/12/28
Private Resident Home	1		572	39119 S Winners Cir	2007/12/28
TOTAL 2007 Lots					62

Owner_Name	Built	Open Lot	lot #	Unit_Address	HOA Settle_Date
Private Resident Home	1		564	39061 S Cracked Corn Dr	2008/01/30
Private Resident Home	1		584	39177 S Rodeo Buckle Dr	2008/02/15
Private Resident Home	1		493	60596 E Flank Strap Dr	2008/02/28
Private Resident Home	1		495	60572 E Flank Strap Dr	2008/03/10
Private Resident Home	1		551	60978 E Cantle Ct	2008/03/21
Private Resident Home	1		555	60938 E Cantle Ct	2008/04/25
Private Resident Home	1		545	60963 E Cantle Ct	2008/04/28
Private Resident Home	1		547	61013 E Cantle Ct	2008/04/28
Private Resident Home	1		561	39024 S Wager Way	2008/05/07
Private Resident Home	1		548	61016 E Cantle Ct	2008/06/13
Private Resident Home	1		540	60909 E Cantle Ct	2008/07/03
Private Resident Home	1		585	39167 S Rodeo Buckle Dr	2008/07/18
Private Resident Home	1		562	39034 S Wager Way	2008/07/25
Private Resident Home	1		546	60973 E Cantle Ct	2008/08/15
Private Resident Home	1		504	39180 S Rodeo Buckle Dr	2008/08/18
Private Resident Home	1		534	38955 S Furlong Ct	2008/08/22
Private Resident Home	1		550	60990 E Cantle Ct	2008/09/05
Private Resident Home	1		535	38943 S Furlong Ct	2008/09/26
Private Resident Home	1		538	38903 S Furlong Ct	2008/09/26
Private Resident Home	1		556	60928 E Cantle Ct	2008/10/29
Private Resident Home	1		537	38919 S Furlong Ct	2008/10/31
Private Resident Home	1		539	38887 S Furlong Ct	2008/10/31
Private Resident Home	1		553	60958 E Cantle Ct	2008/10/31
Private Resident Home	1		531	38991 S Furlong Ct	2008/11/26
Private Resident Home	1		549	61002 E Cantle Ct	2008/12/11
Private Resident Home	1		583	39187 S Rodeo Buckle Dr	2008/12/12
TOTAL 2008 Lots					26
Private Resident Home	1		552	60968 E Cantle Ct	2009/01/08
Private Resident Home	1		554	60948 E Cantle Ct	2009/01/14
Private Resident Home	1		505	39194 S Rodeo Buckle Dr	2009/02/17
Private Resident Home	1		536	38931 S Furlong Ct	2009/03/04
Private Resident Home	1		490	60634 E Flank Strap Dr	2009/05/27
Private Resident Home	1		533	38967 S Furlong Ct	2009/06/01
Private Resident Home	1		532	38979 S Furlong Ct	2009/06/08
TOTAL 2009 Lots					7
DR Horton, Inc		1	481	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	482	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	483	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	484	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	485	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	486	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	487	E Flank Strap Dr	Not Mapped
DR Horton, Inc		1	488	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	489	E Flank Strap Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	506	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	507	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	508	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	509	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	510	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	511	S Rodeo Buckle Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	512	E Silky Mane Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	513	E Silky Mane Dr	Not Platted-Flood Pl.
DR Horton, Inc		1	514	E Silky Mane Dr	Not Platted-Flood Pl.
Total Lots		95	18		

Owner_Name	Built	Open Lot	lot #	Unit_Address	HOA Settle_Date
PHASE IV-B Lots 591-617					
Private Resident Home	1		617	60826 E Eagle Mountain Dr	2007/06/29
Private Resident Home	1		593	60849 E Eagle Mountain Dr	2007/07/27
Private Resident Home	1		592	60837 E Eagle Mountain Dr	2007/08/31
Private Resident Home	1		591	60825 E Eagle Mountain Dr	2007/09/06
Private Resident Home	1		595	60875 E Eagle Mountain Dr	2007/09/21
Private Resident Home	1		607	60958 E Eagle Mountain Dr	2007/12/05
Private Resident Home	1		608	60944 E Eagle Mountain Dr	2007/12/31
TOTAL 2007 Lots					7
Private Resident Home	1		615	60850 E Eagle Mountain Dr	2008/01/16
Private Resident Home	1		616	60838 E Eagle Mountain Dr	2008/01/30
Private Resident Home	1		614	60864 E Eagle Mountain Dr	2008/02/15
Private Resident Home	1		597	60901 E Eagle Mountain Dr	2008/03/21
Private Resident Home	1		596	60889 E Eagle Mountain Dr	2008/04/25
Private Resident Home	1		602	60973 E Eagle Mountain Dr	2008/11/21
Private Resident Home	1		609	60930 E Eagle Mountain Dr	2008/11/21
TOTAL 2008 Lots					7
Private Resident Home	1		603	60985 E Eagle Mountain Dr	2009/02/17 Model Sold
Private Resident Home	1		606	60974 E Eagle Mountain Dr	2009/04/14
Private Resident Home	1		604	60997 E Eagle Mountain Dr	2009/04/15
Private Resident Home	1		600	60943 E Eagle Mountain Dr	2009/04/30
Private Resident Home	1		601	60957 E Eagle Mountain Dr	2009/05/29
Private Resident Home	1		611	60902 E Eagle Mountain Dr	2009/06/19
Private Resident Home	1		599	60929 E Eagle Mountain Dr	2009/10/02
TOTAL 2009 Lots					7
Private Resident Home	1		598	60915 E Eagle Mountain Dr	2010/09/10
Private Resident Home	1		610	60916 E Eagle Mountain Dr	2010/10/29
TOTAL 2010 Lots					2
DR Horton		1	594	60863 E Eagle Mountain Dr	Not Sold
DR Horton		1	605	60984 E Eagle Ridge Dr	Under Construction
DR Horton		1	612	60890 E Eagle Mountain Dr	Vacant Lot
DR Horton		1	613	60876 E Eagle Mountain Dr	Not Sold
TOTAL LOTS		23	4		

AIBA

GOODMAN WATER COMPANY, INC.'s RESPONSES TO
INTERVENOR'S THIRD SET OF DATA REQUESTS
DOCKET NO. W-02500A-10-0382
MARCH 7, 2011

3.01 Please provide a narrative and details on Goodman Water Company's total water works capacity in terms of Equivalent Development/Dwelling Units (EDU's) in the Eagle Crest Ranch development.

RESPONSE: Attached as Appendix "A" is a copy of a "worksheet" previously prepared by WestLand Resources, Inc. which outlines the "Planning and Design Criteria EDU's," which were used in connection with the design of the water system for the Eagle Crest Ranch subdivision.

3.02 Please provide the dates for the earliest date of water service provided to lot numbers 478 to 590 and separately for lot numbers 591 to 617.

RESPONSE: The Company's records indicate that the earliest date for the physical delivery of water service to lots located within (i) lot numbers 478 to 590 and (ii) lot numbers 591 to 617 was February 22, 2007 in each instance.

3.03 Please provide a narrative of the extent of damage to the Goodman Water System that resulted from the recent cold weather. Indicate what water plants were affected, equipment that failed, estimated water lost to leakages, dates and time the failures occurred, time frame for when failure occurred and repairs were completed and associated costs for repairs.

RESPONSE: This information will be provided, when fully compiled, as a supplement to the Company's Responses to this Third Set of Data Requests.

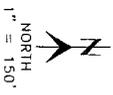
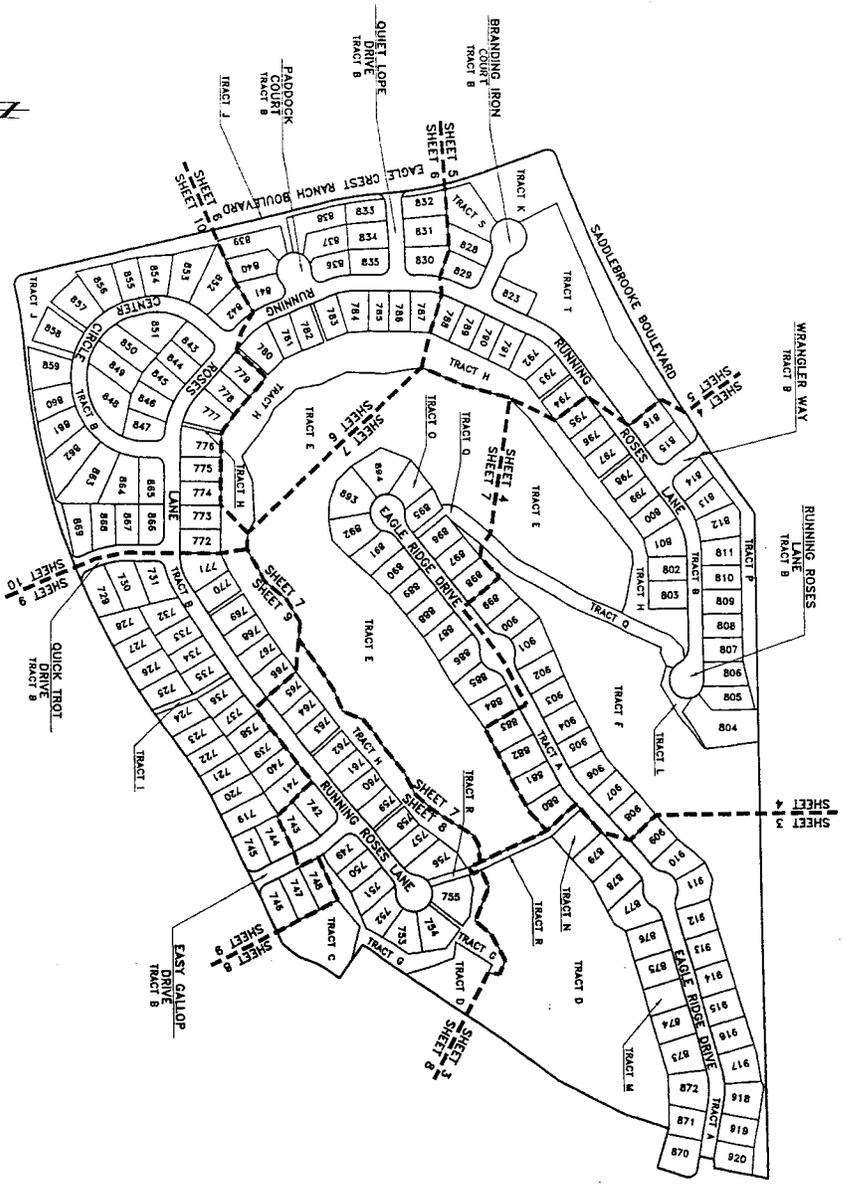
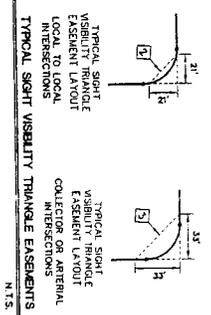
3.04 Please provide a narrative for addressing the attached Water Plant #4 Upgrade for boosting Water Pressure to meet a Fire Flow Capacity of 1,600 GPM for the K Zone that was approved for Construction by the ADEQ on 5/26/04. Include (a) what entity requested the upgrade, (b) what was the total cost of the upgrade, (c) confirm the upgrade was constructed and installed in Water Plant #4, (d) Date the installation was completed and put in service.

RESPONSE: Attached as Appendix "B" are copies of (i) a September 2003 communication from Golder Ranch Fire District to D.R. Horton Homes and (ii) a June 28, 2004 communication from Golder Ranch Fire District to D.R. Horton Homes. These documents indicate that the subject upgrade at Water Plant #4 was occasioned by a 1,500 GPM fire flow capacity requirement enforced by the Golder Ranch Fire District against

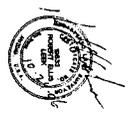
A19

RECORDING DATA

STATE OF ARIZONA
 COUNTY OF MARICOPA
 I hereby certify that the within instrument is that in the original form of the same as the same was filed for recording in the office of the County Clerk of Maricopa County, Arizona, on this 15th day of August, 2010.
 County Clerk
 I, _____, County Clerk of Maricopa County, Arizona, do hereby certify that the within instrument is a true and correct copy of the original as the same was filed for recording in the office of the County Clerk of Maricopa County, Arizona, on this 15th day of August, 2010.
 County Clerk



SHEET INDEX & LAND USE PLAN



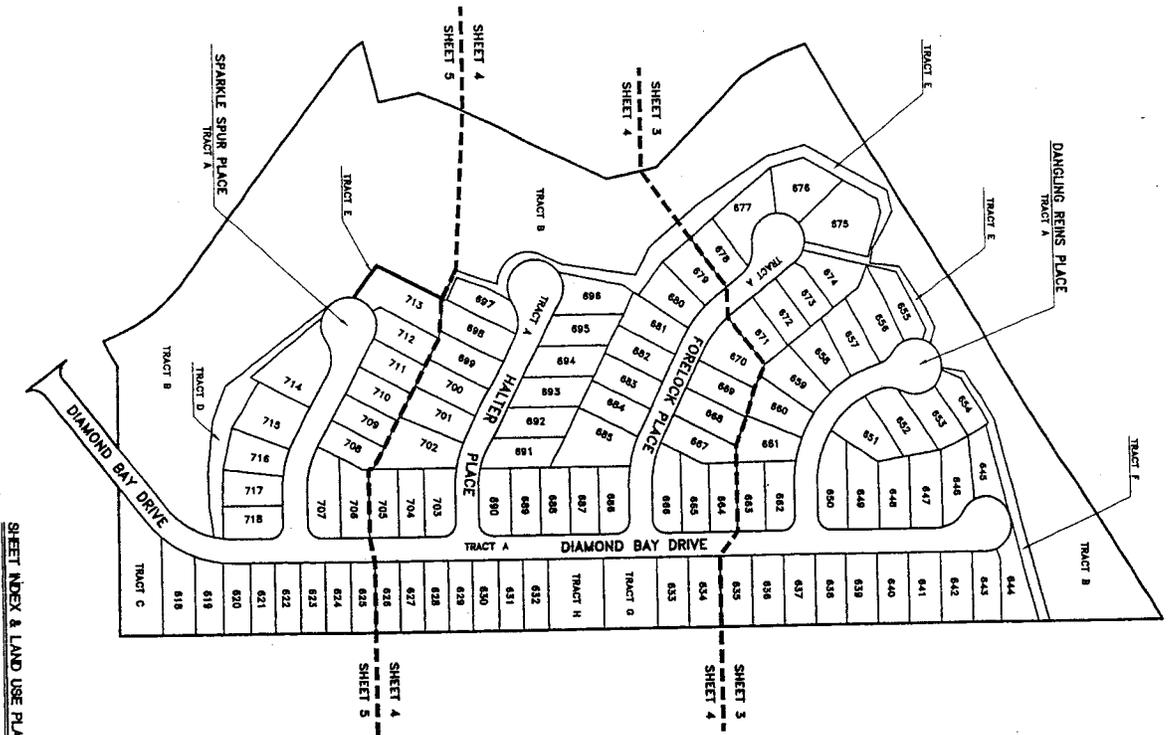
OPW ENGINEERING, L.L.C.
 ENGINEERING SURVEYING PLANNING
 7000 E. Torrey Verde Road Suite 37
 Phoenix, Arizona 85018
 (602) 998-5544
 FUAL PLAT
 EAGLE CREST
 RANCH V
 LOTS 79-86, 82 & 82B-92C
 OPW
 92004-506
 SHEET
 2 OF 10

Owner_Name	Built	Open Lot	lot #	Unit_Address	HOA Settle_Date
PHASE V-A Lots 729-869					
Private Resient Home	1		724	60616 E Eagle Mountain Dr	2008/02/11
Private Resient Home	1		866	39116 S Quick Trot Dr	2008/04/07 Model Sold
Private Resient Home	1		868	39156 S Quick Trot Dr	2008/04/22 Model Sold
Private Resient Home	1		728	60536 E Eagle Mountain Dr	2008/07/23
Private Resient Home	1		726	60576 E Eagle Mountain Dr	2008/07/25
Private Resient Home	1		751	39070 S Running Roses Ln	2008/07/29
Private Resient Home	1		753	39088 S Running Roses Ln	2008/08/13
Private Resient Home	1		727	60558 E Eagle Mountain Dr	2008/09/05
Private Resient Home	1		867	39136 S Quick Trot Dr	2008/10/23 Model Sold
Private Resient Home	1		755	39091 S Running Roses Ln	2008/11/26
TOTAL 2008 Lots					10
CRVI H-AZCO, LLC		1	731	39117 S Quick Trot Dr	2008/10/10
CRVI H-AZCO, LLC		1	734	38966 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	735	38974 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	736	38984 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	737	38990 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	738	38996 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	739	39004 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	740	39012 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	741	39022 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	742	38956 S Easy Gallop Dr	2008/10/10
CRVI H-AZCO, LLC		1	743	38976 S Easy Gallop Dr	2008/10/10
CRVI H-AZCO, LLC		1	744	38998 S Easy Gallop Dr	2008/10/10
CRVI H-AZCO, LLC		1	745	39018 S Easy Gallop Dr	2008/10/10
CRVI H-AZCO, LLC		1	748	38977 S Easy Gallop Dr	2008/10/10
CRVI H-AZCO, LLC		1	749	39054 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	750	39062 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	752	39082 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	754	39094 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	756	39081 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	757	39069 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	758	39061 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	759	39049 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	760	39041 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	761	39033 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	762	39025 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	763	39011 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	764	39003 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	765	38995 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	766	38987 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	767	38979 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	768	38971 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	769	38963 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	774	38911 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	775	38905 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	776	38897 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	777	38883 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	778	38871 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	779	38865 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	780	38855 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	781	38845 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	782	38837 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	783	38825 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	784	38817 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	785	38809 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	786	38801 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	787	38793 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	788	38785 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	789	38777 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	790	38769 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	791	38761 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	792	38753 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	793	38741 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	794	38729 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	795	38721 S Running Roses Ln	2008/10/10
CRVI H-AZCO, LLC		1	796	38713 S Running Roses Ln	2008/10/10

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
CRVI H-AZCO,LLC		1	797	38705 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	798	38693 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	799	38683 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	800	38675 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	801	3863 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	802	38655 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	803	38649 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	804	38616 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	805	38662 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	806	38628 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	807	38634 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	808	38640 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	809	38646 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	810	38652 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	811	38658 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	812	38664 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	813	38670 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	814	38676 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	815	38692 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	816	38704 S Running Roses Ln	2008/10/10
CRVI H-AZCO,LLC		1	823	60254 E Branding Iron Ct	2008/10/10
CRVI H-AZCO,LLC		1	828	60233 E Branding Iron Ct	2008/10/10
CRVI H-AZCO,LLC		1	865	60411 E Center Circle	2008/10/10
CRVI H-AZCO,LLC		1	869	39176 S Quick Trot Dr	2008/10/10
CRVI H-AZCO,LLC		1	829	60253 E Branding Iron Ct	2009/03/13
CRVI H-AZCO,LLC		1	830	60234 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	831	60210 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	832	60186 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	833	60185 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	834	60209 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	835	60233 E Quiet Lope Dr	2009/03/13
CRVI H-AZCO,LLC		1	836	60244 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	837	60220 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	838	60194 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	839	60197 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	840	60221 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	841	60245 E Paddock Ct	2009/03/13
CRVI H-AZCO,LLC		1	842	60271 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	843	38868 S Running Roses Ln	2009/03/13
CRVI H-AZCO,LLC		1	844	38874 S Running Roses Ln	2009/03/13
CRVI H-AZCO,LLC		1	845	38882 S Running Roses Ln	2009/03/13
CRVI H-AZCO,LLC		1	846	38888 S Running Roses Ln	2009/03/13
CRVI H-AZCO,LLC		1	847	38894 S Running Roses Ln	2009/03/13
CRVI H-AZCO,LLC		1	848	60372 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	849	60340 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	850	60328 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	851	60302 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	852	60279 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	853	60289 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	854	60299 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	855	60309 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	856	60319 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	857	60329 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	858	60341 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	859	60353 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	860	60363 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	861	60373 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	862	60383 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	863	60393 E Center Circle	2009/03/13
CRVI H-AZCO,LLC		1	864	60403 E Center Circle	2009/03/13
Richmond American		1	719	60698 E Eagle Mountain Dr	2010/04/02
Richmond American		1	720	60680 E Eagle Mountain Dr	2010/04/02
Richmond American		1	721	60664 E Eagle Mountain Dr	2010/04/02
Richmond American		1	722	60648 E Eagle Mountain Dr	2010/04/02
Richmond American		1	723	60632 E Eagle Mountain Dr	2010/04/02
Richmond American		1	725	60594 E Eagle Mountain Dr	2010/04/02
Richmond American		1	729	39175 S Quick Trot Dr	2010/04/02
Richmond American		1	730	39147 S Quick Trot Dr	2010/04/02
Richmond American		1	746	39017 S Easy Gallop Dr	2010/04/02
Richmond American		1	747	38997 S Easy Gallop Dr	2010/04/02
Richmond American		1	732	38946 S Running Roses Ln	2010/08/03

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Richmond American		1	733	38956 S Running Roses Ln	2010/08/03
Richmond American		1	770	38949 S Running Roses Ln	2010/08/03
Richmond American		1	771	38937 S Running Roses Ln	2010/08/03
Richmond American		1	772	38925 S Running Roses Ln	2010/08/03
Richmond American		1	773	38919 S Running Roses Ln	2010/08/03
CRVI H-AZCO,LLC		1	817	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	818	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	819	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	820	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	821	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	822	Running Roses Ln-Track T	Not Plated
CRVI H-AZCO,LLC		1	824	Branding Iron Ct.-Track T	Not Plated
CRVI H-AZCO,LLC		1	825	Branding Iron Ct.-Track T	Not Plated
CRVI H-AZCO,LLC		1	826	Branding Iron Ct.-Track T	Not Plated
CRVI H-AZCO,LLC		1	827	Branding Iron Ct.-Track S	Not Plated
TOTAL LOTS:		10	141		

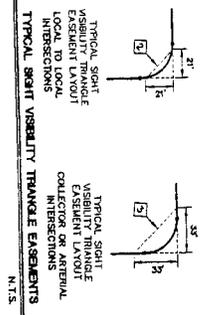
Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
PHASE V-B Lots 870-920					
Private Resident Home	1		892	60441 E Eagle Ridge Dr	2008/04/23
Private Resident Home	1		880	60669 E Eagle Ridge Dr	2008/10/24
Private Resident Home	1		894	60414 E Eagle Ridge Dr	2008/11/03
Private Resident Home	1		893	60417 E Eagle Ridge Dr	2008/11/21
TOTAL 2008 Lots					4
Private Resident Home	1		877	60755 E Eagle Ridge Dr	2009/01/20
Private Resident Home	1		918	60922 E Eagle Ridge Dr	2009/03/12
TOTAL 2009 Lots					2
CRVI H-AZCO,LLC		1	870	60990 E Eagle Mountain Dr	2008/10/10
CRVI H-AZCO,LLC		1	871	60947 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	872	60917 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	873	60879 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	874	60857 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	875	60813 E Eagle Ridge Dr	2008/10/10
CRIV H-AZCO,LLC		1	876	60791 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	878	60727 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	879	60709 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	881	60651 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	882	60633 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	883	60613 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	884	60593 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	885	60569 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	886	60547 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	887	60527 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	888	60509 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	889	60491 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	890	60473 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	891	60457 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	895	60454 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	896	60474 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	897	60492 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	898	60510 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	899	60528 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	900	60548 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	901	60568 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	902	60588 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	903	60606 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	904	60626 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	905	60646 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	906	60668 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	907	60688 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	908	60706 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	909	60724 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	910	60744 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	911	60766 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	912	60788 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	913	60810 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	914	60832 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	915	60854 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	916	60876 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	917	60900 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	919	60946 E Eagle Ridge Dr	2008/10/10
CRVI H-AZCO,LLC		1	920	60968 E Eagle Ridge Dr	2008/10/10
TOTAL LOTS		6	45		



SHEET INDEX & LAND USE PLAN

RECORDING DATA

COUNTY SEAL: 
 DATE OF RECORD: 02/17/10
 COUNTY OF: CLATSOP
 DISTRICT: 1
 PREPARED BY: OPW ENGINEERING, L.L.C.
 DRAWN BY: DAVID SWITH
 CHECKED BY: DAVID SWITH
 TITLE: FINAL PLAT



TYPICAL SIGHT VISIBILITY TRIANGLE ARTERIAL INTERSECTIONS
 TYPICAL SIGHT VISIBILITY TRIANGLE LOCAL TO LOCAL INTERSECTIONS
 N.T.S.

1922



OPW ENGINEERING, L.L.C.
 ENGINEERING
 2700 NE Oregon Street
 Tualatin, Oregon 97156
 (503) 298-8214

FINAL PLAT
 EAGLE CREST
 PHASE IV - C
 LOTS 632 THROUGH 718

OPW Job No. 92004-406
 SHEET 2 OF 5

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
PHASE IV-C Lots 617-718					
Private Residence Home	1		633	39577 S Diamond Bay Dr	2009/01/26
Private Residence Home	1		651	61058 E Dangling Reins Pl	2009/01/28
Private Residence Home	1		632	39655 S Diamond Bay Dr	2009/02/18
Private Residence Home	1		644	39381 S Diamond Bay Dr	2009/02/19
Private Residence Home	1		675	60956 E Forelock Pl	2009/03/13
Private Residence Home	1		650	39486 S Diamond Bay Dr	2009/04/23
Private Residence Home	1		652	61042 E Dangling Reins Pl	2009/05/01
Private Residence Home	1		655	61027 E Dangling Reins Pl	2009/06/17
Private Residence Home	1		656	61035 E Dangling Reins Pl	2009/07/13
Private Residence Home	1		653	61034 E Dangling Reins Pl	2009/07/14
Private Residence Home	1		641	39433 S Diamond Bay Dr	2009/11/09
Private Residence Home	1		645	39394 S Diamond Bay Dr	2009/11/16
Private Residence Home	1		646	39412 S Diamond Bay Dr	2009/11/17
Private Residence Home	1		647	39430 S Diamond Bay Dr	2009/11/17
Private Residence Home	1		648	39448 S Diamond Bay Dr	2009/11/18
Private Residence Home	1		649	39466 S Diamond Bay Dr	2009/12/05
Private Residence Home	1		661	61081 E Dangling Reins Pl	2009/12/21
Private Residence Home	1		643	39397 S Diamond Bay Dr	2009/12/30
				TOTAL 2009 Lots	18
Private Residence Home	1		660	61073 E Dangling Reins Pl	2010/01/25
Private Residence Home	1		676	60953 E Forelock Pl	2010/02/22
Private Residence Home	1		642	39415 S Diamond Bay Dr	2010/03/11
Private Residence Home	1		662	39516 S Diamond Bay Dr	2010/03/22
Private Residence Home	1		673	60974 E Forelock Pl	2010/03/26
Private Residence Home	1		657	61043 E Dangling Reins Pl	2010/03/29
Private Residence Home	1		659	61063 E Dangling Reins Pl	2010/04/12
Private Residence Home	1		654	61026 E Dangling Reins Pl	2010/04/14
Private Residence Home	1		672	60986 E Forelock Pl	2010/04/16
Private Residence Home	1		671	60998 E Forelock Pl	2010/04/26
Private Residence Home	1		663	39532 S Diamond Bay Dr	2010/04/28
Private Residence Home	1		658	61051 E Dangling Reins Pl	2010/05/18
Private Residence Home	1		640	39451 S Diamond Bay Dr	2010/05/26
Private Residence Home	1		639	39469 S Diamond Bay Dr	2010/06/18
Private Residence Home	1		637	39505 S Diamond Bay Dr	2010/06/28
Private Residence Home	1		667	61064 E Forelock Pl	2010/06/30
Private Residence Home	1		670	61016 E Forelock Pl	2010/07/14
Private Residence Home	1		638	39487 S Diamond Bay Dr	2010/07/16
Private Residence Home	1		669	61036 E Forelock Pl	2010/07/19
Private Residence Home	1		694	61028 E Halter Pl	2010/08/05
Private Residence Home	1		696	60994 E Halter Pl	2010/08/06
Private Residence Home	1		665	39564 S Diamond Bay Dr	2010/08/19
Private Residence Home	1		664	39548 S Diamond Bay Dr	2010/08/25
Private Residence Home	1		636	39523 S Diamond Bay Dr	2010/08/27
Private Residence Home	1		668	61046 E Forelock Pl	2010/08/27
Private Residence Home	1		695	61012 E Halter Pl	2010/08/31
Private Residence Home	1		635	39541 S Diamond Bay Dr	2010/09/23
Private Residence Home	1		677	60975 E Forelock Pl	2010/09/30
Private Residence Home	1		634	39559 S Diamond Bay Dr	2010/10/20
Private Residence Home	1		666	39580 S Diamond Bay Dr	2010/11/05
Private Residence Home	1		693	61044 E Halter Pl	2010/11/12
Private Residence Home	1		692	61062 E Halter Pl	2010/11/16
Private Residence Home	1		681	61021 E Forelock Pl	2010/11/18

Owner_Name	Built	Open Lot	lot #	Unit Address	HOA Settle_Date
Prevate Residence Home	1		685	61083 E Forelock Pl	2010/12/29
TOTAL 2010 Lots					34
Prevate Residence Home	1		674	60964 E Forelock Pl	2011/01/20
Prevate Residence Home	1		679	61003 E Forelock Pl	2011/02/03
Prevate Residence Home	1		630	39683 S Diamond Bay Dr	2011/02/11
Prevate Residence Home	1		628	39707 S Diamond Bay Dr	2011/02/17
Prevate Residence Home	1		682	61033 E Forelock Pl	2011/02/18
TOTAL 2011 Lots					6
CRVI H-AZCO,LLC		1	624	39763 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	625	39749 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	626	39735 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	627	39721 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	690	39676 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	697	61009 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	698	61025 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	699	61041 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	700	61057 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	701	61073 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	702	61085 E Halter Pl	2008/10/10
CRVI H-AZCO,LLC		1	703	39706 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	704	39722 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	705	39738 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	706	39754 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	707	39770 S Diamond Bay Dr	2008/10/10
CRVI H-AZCO,LLC		1	708	61066 E Sparkle Spur	2008/10/10
CRVI H-AZCO,LLC		1	709	61052 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	710	61038 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	711	61024 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	714	61039 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	715	61069 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	716	61087 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	717	61101 E Sparkle Spur Pl	2008/10/10
CRVI H-AZCO,LLC		1	718	61117 E Sparkle Spur Pl	2008/10/10
DR Horton		1	678	60991 E Forelock Pl	2010/02/25
DR Horton		1	680	61013 E Forelock Pl	2010/02/25
DR Horton		1	683	61049 E Forelock Pl	2010/05/25
DR Horton		1	684	61065 E Forelock Pl	2010/05/25
DR Horton		1	686	39612 S Diamond Bay Dr	2010/05/25
DR Horton		1	687	39628 S Diamond Bay Dr	2010/05/25
DR Horton		1	688	39644 S Diamond Bay Dr	2010/05/25
DR Horton		1	691	61080 E Halter Pl	2010/05/25
DR Horton		1	629	39695 S Diamond Bay Dr	2010/08/26
DR Horton		1	631	39669 S Diamond Bay Dr	2010/08/26
DR Horton		1	618	39851 S Diamond Bay Dr	2011/02/24
DR Horton		1	619	39833 S Diamond Bay Dr	2011/02/24
DR Horton		1	620	39817 S Diamond Bay Dr	2011/02/24
DR Horton		1	621	39803 S Diamond Bay Dr	2011/02/24
DR Horton		1	622	39789 S Diamond Bay Dr	2011/02/24
DR Horton		1	623	39777 S Diamond Bay Dr	2011/02/24
DR Horton		1	689	39660 S Diamond Bay Dr	2011/02/24
DR Horton		1	712	61010 E Sparkle Spur Pl	2011/02/24
DR Horton		1	713	60996 E Sparkle Spur Pl	2011/02/24
TOTAL LOTS		57	44		

Owner Name	Built	Open Lot	lot #	Unit Address	HOA Settle Date
Phase 6 Lot 921-958					
EC Development		1	921	Trifecta Drive	Not Platted
EC Development		1	922	Trifecta Drive	Not Platted
EC Development		1	923	Trifecta Drive	Not Platted
EC Development		1	924	Trifecta Drive	Not Platted
EC Development		1	925	Trifecta Drive	Not Platted
EC Development		1	926	Trifecta Drive	Not Platted
EC Development		1	927	Trifecta Drive	Not Platted
EC Development		1	928	Trifecta Drive	Not Platted
EC Development		1	929	Trifecta Drive	Not Platted
EC Development		1	930	Trifecta Ct.	Not Platted
EC Development		1	931	Trifecta Ct.	Not Platted
EC Development		1	932	Trifecta Ct.	Not Platted
EC Development		1	933	Trifecta Ct.	Not Platted
EC Development		1	934	Trifecta Drive	Not Platted
EC Development		1	935	Trifecta Drive	Not Platted
EC Development		1	936	Trifecta Drive	Not Platted
EC Development		1	937	Trifecta Drive	Not Platted
EC Development		1	938	Trifecta Drive	Not Platted
EC Development		1	939	Trifecta Drive	Not Platted
EC Development		1	940	Trifecta Drive	Not Platted
EC Development		1	941	Trifecta Drive	Not Platted
EC Development		1	942	Old Arena Drive	Not Platted
EC Development		1	943	Old Arena Drive	Not Platted
EC Development		1	944	Old Arena Drive	Not Platted
EC Development		1	945	Old Arena Drive	Not Platted
EC Development		1	946	Old Arena Drive	Not Platted
EC Development		1	947	Old Arena Drive	Not Platted
EC Development		1	948	Old Arena Drive	Not Platted
EC Development		1	949	Old Arena Drive	Not Platted
EC Development		1	950	Old Arena Drive	Not Platted
EC Development		1	951	Old Arena Drive	Not Platted
EC Development		1	952	Old Arena Drive	Not Platted
EC Development		1	953	Old Arena Drive	Not Platted
EC Development		1	954	Old Arena Drive	Not Platted
EC Development		1	955	Old Arena Drive	Not Platted
EC Development		1	956	Old Arena Drive	Not Platted
EC Development		1	957	Old Arena Drive	Not Platted
EC Development		1	958	Old Arena Drive	Not Platted
TOTAL LOTS	0	38			

A25

LAGO DEL ORO WATER COMPANY
40,000 S. RIDGEVIEW
TUCSON, ARIZONA 85739
520-825-3423

UTILITY: LAGO DEL ORO WATER CO.

EFFECTIVE: MAY 1, 1989

RATES AND CHARGES

MINIMUM CHARGE
PER MONTH

SERVICE LINE & METER
INSTALLATION CHARGES

<u>METER</u>	<u>CHARGE</u>	<u>GALLONS</u>
5/8 X 3/4"	\$ <u>12.40</u>	<u>2,000</u>
3/4"	\$ <u>12.40</u>	<u>2,000</u>
1"	\$ <u>18.00</u>	<u>2,000</u>
1 1/2"	\$ <u>28.00</u>	<u>2,000</u>
2"	\$ <u>40.00</u>	<u>2,000</u>
3"	\$ <u>62.00</u>	<u>2,000</u>
4"	\$ <u>84.00</u>	<u>2,000</u>
5"	\$ <u>106.00</u>	<u>2,000</u>
6"	\$ <u>128.00</u>	<u>2,000</u>
8"	\$ <u>150.00</u>	<u>2,000</u>

<u>METER</u>	<u>CHARGE</u>
5/8 X 3/4"	\$ <u>250.00</u>
3/4"	\$ <u>275.00</u>
1"	\$ <u>300.00</u>
1 1/2"	\$ <u>450.00</u>
2"	\$ <u>625.00</u>
3"	\$ <u>800.00</u>
4"	\$ <u>975.00</u>
5"	\$ <u>1,150.00</u>
6"	\$ <u>1,325.00</u>
8"	\$ <u>1,500.00</u>

EXCESS OF MINIMUM:

\$ 1.80 PER 1,000 GALLONS

SERVICE CHARGES:

- | | |
|----------------------------------|---|
| 1. ESTABLISHMENT | \$ <u>25.00</u> |
| 2. ESTABLISHMENT AFTER HOURS | \$ <u>30.00</u> |
| 3. RECONNECTION/DELINQUENT | \$ <u>25.00</u> |
| 4. NSF CHECK | \$ <u>10.00</u> |
| 5. METER REREAD IF CORRECT | \$ <u>15.00</u> |
| 6. METER TEST IF CORRECT | \$ <u>30.00</u> |
| 7. DEFERRED PAYMENT | <u>15% PER ANNUM</u> |
| 8. REESTABLISHMENT WITHIN 12 MOS | # OF MONTHS OFF THE SYSTEM
TIMES THE MINIMUM |

OTHER RATES & CHARGES APPROVED BY ORDER:

IN ADDITION TO THE COLLECTION OF ITS REGULAR RATES AND CHARGES, THE COMPANY SHALL COLLECT FROM CUSTOMERS THEIR PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES OR USE TAX IN ACCORDANCE WITH R14-2-409.D.5.

PLUS REGULATORY & RUCO ASSESSMENTS.

A26

WATER TARIFF SCHEDULE

UTILITY: RIDGEVIEW UTILITY COMPANY
DOCKET NO: W-03861A-00-0208

DECISION NO: 62861
EFFECTIVE: 08-24-00

RATES AND CHARGES

CUSTOMER MINIMUM CHARGES (PER MONTH):

<u>METER</u>	<u>CHARGES</u>	<u>GALLONS</u>
5/8" X 3/4"	\$25.00	0
3/4"	\$25.00	0
1"	\$51.00	0
1 1/2"	\$64.00	0
2"	\$102.00	0
4"	\$204.00	0
6"	\$408.00	0
8"	\$200.00	0
10"	\$200.00	0

COMMODITY CHARGE:

PER 1,000 GALLONS	\$3.41
IRRIGATION, PER 1,000 GALLONS - Golf Courses Only	\$0.87

SERVICE CHARGES

- | | |
|--|------------------------------------|
| 1. ESTABLISHMENT (R14-2-603.D.1) | \$50.00 |
| 2. ESTABLISHMENT/AFTER HOURS (R14-2-403.D.2) | \$35.00 |
| 3. RECONNECTION /DELINQUENT (R14-2-403.D.1) | \$30.00 |
| 4. NSF CHECK (R14-2-409) | \$15.00 |
| 5. METER REREAD/IF CORRECT (R14-2-403.C.2) | \$15.00 |
| 6. METER RETEST/IF CORRECT (R14-2-40.F.1) | \$30.00 |
| 7. DEFERRED PAYMENT (PER MONTH) | 1.50% PER MONTH OF UNPAID BALANCE |
| 8. DEPOSIT INTEREST (R14-2-403.B) | PER RULE |
| 9. DEPOSIT (R14-2-403.B) | PER RULE |
| 10. RE-ESTABLISHMENT W/N 12 MONTHS | MONTH OFF SYSTEM TIMES THE MINIMUM |

OTHER RATES AND CHARGES APPROVED BY ORDER

IN ADDITION TO THE COLLECTION OF ITS REGULAR RATES AND CHARGES, THE COMPANY SHALL COLLECT FROM CUSTOMERS THEIR PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES OR USE TAX IN ACCORDANCE WITH R-14-2-608.D5.

*Dont charge RUCO or Regulatory per Jim Poulos
we do charge Superfund.
5/27/04*

WATER RATES ORIGINAL

A27

ARIZONA WATER COMPANY		A.C.C. No.	465
Phoenix, Arizona		Cancelling A.C.C. No.	None
Filed by:	William M. Garfield	Tariff or Schedule No.	WG-276
Title:	President	Filed:	August 18, 2005
Date of Original Filing:	November 19, 2004	Effective:	For all service rendered on or after July 25, 2000
System:	SADDLEBROOKE RANCH		

GENERAL SERVICE

AVAILABILITY:

In SaddleBrooke Ranch and environs at all points where facilities of adequate capacity and pressure are adjacent to the premises served.

APPLICATION:

To all water service required when such service is supplied at one premise through one point of delivery and measured through one meter. Not applicable to temporary, standby, supplementary or resale service.

MONTHLY BILL:	Minimum: \$	15.00	for	5/8" x 3/4"	meter
		37.50	"	1"	"
		100.00	"	2"	"
		150.00	"	3"	"
		200.00	"	4"	"
		475.00	"	6"	"
		600.00	"	8"	"
		650.00	"	10"	"

Commodity Rate: \$ 0.410 per 100 gallons for all gallons

Adjustment: Plus the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of the gross revenues of the Company and/or the price or revenue from the water or service sold and/or the volume of water pumped or purchased for sale and/or sold hereunder. In the event of any increase or decrease in taxes or other governmental impositions, rates shall be adjusted to reflect such increase or decrease.

SPECIAL PROVISIONS:

1. Subject to the Company's Tariff Schedule SC-265.
2. If service is to be re-established at the same service location for a customer who has there ordered a service disconnection within the preceding 12-month period, or for any member of such customer's household, a non-refundable charge of eight (8) times the customer's monthly minimum charge and the appropriate tax adjustment will be required as a precondition to the establishment of such service. Payment for such charge shall be made at the time of application for re-establishment of service.

TERMS AND CONDITIONS:

Subject to the Company's Tariff Schedule TC-243.

APPROVED FOR FILING

DECISION #: 62754

A28



Los Cerros Water Company, Inc

Rates and Terms

[Home](#)

[Forms](#)

[FAQ'S](#)

[Rates](#)

[Conservation Tips](#)

Rates Effective January 1, 1998
A.C.C. Decision No. 60562

* Per Commission rule A.A.C. R14-2-403

** Number of months off system times the minimum per Commission rule A.A.C. 14-2-4

*** 1% of monthly minimum for a comparabl connection, but not less than \$5.00 per mon Requires separate service line.

Monthly Usage Charges:

5/8" x 3/4" Meter (Residential)	\$ 12.50
3/4" Meter	\$ 18.75
1" Meter	\$ 31.25
1 1/2" Meter	\$ 62.50
2" Meter	\$ 100.00
3" Meter	\$ 187.50
4" Meter	\$ 312.50
6" Meter	\$ 625.00

TERMS AND CONDITIONS:

Meters are read approximately - 15th of eac
Bills are mailed approximately - 18th of eac
Bills are due no later than the 1st day of nex

Gallons Included in Minimum -0-

Bills are delinquent after the due date.

Gallorage Charge (Per 1,000 Gallons) \$ 2.44

State Tax Rate 6.1%
Water Usage Tax Rate .65 % per 1,000 gallons

A 10-day "FINAL" notice will be sent 5 days date.

Monthly Service Charge of Fire Sprinklers:

4" or Smaller Meter	***
6" to Larger than 10" Meter	***

Account must be paid in full by the time & da the shut-off notice.

Service Line and Meter Installation Charges:
(Refundable pursuant to A.A.C. R14-2-405)

Payments can be made by check, money or Credit Card. Automatic checking account tr: available.

5/8" x 3/4" Meter (Residential)	\$ 240.00
3/4" Meter	\$ 280.00
1" Meter	\$ 360.00
1 1/2" Meter	\$ 450.00
2" Meter	\$ 560.00
3" Meter	\$ 700.00
4" Meter	\$ 1,300.00
6" Meter	\$ 2,800.00

Service Charges:

Establishment	\$ 20.00
Establishment (After Hours)	\$ 30.00
Reconnection (Delinquent)	\$ 25.00
Meter Test (If Correct)	\$ 25.00
Deposit	*
Deposit Interest	*
Reestablishment (Within 12 Months)	**

A28

NSF Check	\$ 15.00
Deferred Payment	1.5%
Meter Re-read (If Correct)	\$ 15.00

A29

ORO VALLEY WATER UTILITY
NEW RATES ADOPTED BY RESOLUTION NO. (R) 09-74 ON NOVEMBER 18, 2009
RATES EFFECTIVE DECEMBER 19, 2009

POTABLE WATER RATES

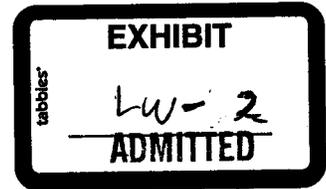
METER SIZE	BASE RATE includes ZERO gallons	COMMODITY TIER 1 \$2.20 PER 1000 GALS.	COMMODITY TIER 2 \$2.99 PER 1000 GALS.	COMMODITY TIER 3 \$4.03 PER 1000 GALS.	COMMODITY TIER 4 \$5.38 PER 1000 GALS.
5/8 x 3/4	\$14.19	0 - 7,000	7,001 - 16,000	16,001 - 32,000	OVER 32,000
3/4 x 3/4	\$21.29	0 - 10,000	10,001 - 24,000	24,001 - 48,000	OVER 48,000
1	\$35.48	0 - 17,000	17,001 - 40,000	40,001 - 80,000	OVER 80,000
1.5	\$70.95	0 - 35,000	35,001 - 80,000	80,001 - 160,000	OVER 160,000
2	\$113.53	0 - 56,000	56,001 - 128,000	128,001 - 256,000	OVER 256,000
3	\$227.05	0 - 112,000	112,001 - 256,000	256,001 - 512,000	OVER 512,000
4	\$354.77	0 - 175,000	175,001 - 400,000	400,001 - 800,000	OVER 800,000
6	\$709.54	0 - 860,000	860,001 - 2,000,000	2,000,001 - 3,500,000	OVER 3,500,000
8	\$1,135.26	0 - 860,000	860,001 - 2,000,000	2,000,001 - 3,500,000	OVER 3,500,000

POTABLE WATER USE
GROUNDWATER PRESERVATION FEE: \$0.75 PER 1,000 GALLONS

CONSTRUCTION WATER RATES

METER SIZE	BASE RATE includes ZERO gallons	COMMODITY TIER 1 COST PER 1000 GALS.	COMMODITY TIER 2	COMMODITY TIER 3	COMMODITY TIER 4
1.5	\$70.95	\$6.38	N/A	N/A	N/A
2	\$113.53	\$6.38	N/A	N/A	N/A
3	\$227.05	\$6.38	N/A	N/A	N/A
4	\$354.77	\$6.38	N/A	N/A	N/A
6	\$709.54	\$6.38	N/A	N/A	N/A
8	\$1,135.26	\$6.38	N/A	N/A	N/A

Groundwater Preservation Fee applies to all construction water use.



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BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

**SURREBUTTAL TESTIMONY OF

LAWRENCE WAWRZYNIAK

IN RESPONSE TO TESTIMONY FROM:

MR. JAMES SHINER
OF THE
GOODMAN WATER COMPANY
AND
MR. MARK TAYLOR
OF
WESTLAND RESOURCES, INC.**

June 13, 2011

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Q1. PLEASE STATE YOUR NAME AND ADDRESS.

A1. My name is Lawrence Wawrzyniak. My home address is 39485 S. Mountain Shadow Dr., Tucson, AZ 85739.

Q2. PLEASE INDICATE ANY UNIQUE QUALIFICATIONS.

A2. I have been a member of the Eagle Crest Ranch Homeowners Advisory Committee (HEAC) since 2006 and serving as HEAC Chairman in 2008 and 2009. I am currently Chairman of the Landscape and Maintenance Committee. The HEAC advises the Declarant controlled HOA Board.

Q3. ON WHOSE BEHALF ARE YOU TESTIFYING?

A3. I am testifying on behalf of myself as an Intervenor in this case

Q4. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS CASE?

A4. I am testifying in opposition to positions taken by Goodman Water Company (GWC).

Q5. PLEASE SUMMARIZE THE AREAS WHERE YOU HAVE PROBLEMS WITH POSITIONS TAKEN BY GOODMAN WATER COMPANY.

A5. I disagree with Mr. Shiner that EC Development was the Developer of all of the Building Phases. I also question the validity of the spin that Mr. Shiner puts on the modification of Water Plant No.4 in as much that he states the decisions were made through the result of his ultimate decision-making authority. GWC has yet to produce either Book Entries or Invoices showing DR Horton's payment outside of Contribution in Aid to Construction Payments.

1 Q6. What makes you believe EC Development was not the developer all the
2 finished lots in the Eagle Crest Development?

3 A6. I refer to the Final Plat Maps filed with Pinal County.

4	Phase	Date	Owner
5	Initial Plat	10/25/00	Goodman Ranch Associates (Sears)
6	I	12/18/01	DR Horton
7	II	6/23/03	Fidelity National Title (J. Shiner)
8	III	6/2/04	Fidelity National Title (J. Shiner)
9	IV-A	9/11/06	Dr Horton
10	IV-C	2/12/07	DR Horton
11	V	5/22/07	DR Horton

12 From this filing I disagree with Mr. Shiner's statements that DR Horton
13 preferred to deal with only finished Lots. This is consistent with my
14 experience and involvement with the HEAC that Dr Horton owned and
15 developed the final major phases of Eagle Crest Ranch as I dealt
16 directly with their Project managers and staff. DR Horton was the
17 Declarant of our HOA at the time. Dr Horton would have been in
18 control on how the lots were developed and not EC Development. See
19 Appendix A 1 to 6.

20 **Q7. What else leads you to question the historical sense of control that**
21 **EC Development had on the development of Eagle Crest Ranch?**

22 A7. GWC conducted a tour of the water plants on December 17, 2010 for
23 the benefit of RUCO Staff and our State Senator. I was invited to
24 attend by our Chairperson of the HEAC on December 16, 2010, who in
25 turn was asked by our State Senator to invite some of the homeowners
26 to join him on the tour. During that tour, we stopped at Water Plant
27 #4 and Mark Taylor gave a general description of the equipment and
28 how the plant worked. He indicated that the Plant #4 was purely a
29 Pressure Plant and was built to provide 1200 gpm: 1000 gpm for fire

1 flow and 200 gpm for water delivery. When asked by one of the
2 members in the group why it wasn't the same as the J Zones 1500
3 gpm, Mr. Taylor indicated that to build a system to deliver 1500 gpm
4 was difficult. You would have to put in larger pumps and oversized
5 pipes. There was some discussion about some houses having
6 Automatic Fire Sprinklers and some without but Mr. Taylor was under
7 the assumption that the fire department allowed 1,000 gpm if all the
8 houses had Fire Sprinklers. He summarized that both the hills were
9 1000 gpm and everything below them were 1500 gpm for fire flow.

10 If Mr. Taylor believed that modifying the system to deliver 1500 gpm
11 was difficult, why would he not remember such a significant event as
12 the plant modification? It was obvious that there were four pumps at
13 the water plant and Mr. Taylor's initial drawings only showed three
14 pumps for this plant.

15 There was no mention of the fact that Water Plant #4 was modified
16 and capable of providing 1600 gpm. I was aware of the modification
17 through public information requests with the ADEQ and Golder Ranch
18 Fire District. GWC later admitted to the plant modification through
19 Intervenor Discovery Request 3.04. See Appendix B

20 We also asked GWC for the Cost of the Modification and after sixteen
21 (16) day extension in time, GWC responded that "it appeared that
22 GWC did not pay for the modification". See Appendix C.

23 So now they profess that DR Horton, then a part owner of GWC, paid
24 for the modifications and that Mr. Shiner led the charge and is
25 promoting this abuse of DR Horton's influence to have the water
26 system modified for their personal gain leaving us with the expense of
27 supporting extra infrastructure and increased water storage
28 requirements.

29 Mr. Taylor was not firmly aware of who paid for the modifications and
30 he must have been very involved with the modifications. He states in
31 his Rebuttal Testimony, Page 22, Line 22, "it is my understanding that
32 the Company did not pay for the cost of that upgrade"

1 If this was such a memorable example of Mr. Shiner's decision making
2 authority, why did he not bring this to the attention of RUCO and the
3 State Senator during the tour? Why has GWC not been able to produce
4 the documents supporting their statements that DR Horton paid for
5 the modifications? Where are the book transactions and supporting
6 Invoices for the modifications outside of Contributions to Aid in
7 Construction payments? I would also ask the ACC to investigate if the
8 plant and equipment modification costs were included by GWC in the
9 last rate case W-2500A-06-0281.

10 **Q8. Are there any other issues raised by the other parties to this case**
11 **which you wish to address at this time in your prepared Surrebuttal**
12 **Testimony?**

13 A8. No; not at this time. However, my silence on other matters does not
14 mean that I am in agreement.

15 **Q9. Does this conclude your Surrebuttal Testimony?**

16 A9. Yes, it does.

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APPENDIX A

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APPENDIX B

**INTERVENOR'S THIRD SET OF DATA REQUESTS TO
GOODMAN WATER COMPANY, INC.
DOCKET NO. W-02500A-10-0382
February 26, 2011**

- 3.01 Please provide a narrative and details on Goodman Water Company's total water works capacity in terms of Equivalent Development/Dwelling Units (EDU's) (a) for total homes planned (b) for total commercial property planned, in the Eagle Crest Ranch development.
- 3.02 Please provide the dates for the earliest date of water service provided to lot numbers 478 to 590 and separately for lot numbers 591 to 617.
- 3.03 Please provide a narrative of the extent of damage to the Goodman Water System that resulted from the recent cold weather. Indicate what water plants were affected, equipment that failed, estimated water lost to leakages, dates and time the failures occurred, time frame for when failure occurred and repairs were completed and associated costs for repairs.
- * 3.04 Please provide a narrative for addressing the attached Water Plant #4 Upgrade for boosting Water Pressure to meet a Fire Flow Capacity of 1,600 GPM for the K Zone that was approved for Construction by the ADEQ on 5/26/04. Include (a) what entity requested the upgrade, (b) what was the total cost of the upgrade, (c) confirm the upgrade was constructed and installed in Water Plant #4, (d) Date the installation was completed and put in service.

**LAWRENCE V. ROBERTSON, JR.
ATTORNEY AT LAW**

**P. O. Box 1448
TUBAC, ARIZONA 85646**

**(520) 398-0411
FAX: (520) 398-0412
EMAIL: TUBACLAWYER@AOL.COM**

**OF COUNSEL TO
MUNGER CHADWICK, P.L.C.**

**ADMITTED TO PRACTICE IN:
ARIZONA, COLORADO, MONTANA,
NEVADA, TEXAS, WYOMING,
DISTRICT OF COLUMBIA**

March 7, 2011

Lawrence Wawrzyniak
39485 S. Mountain Shadow Dr.
Tucson, AZ 85739

James Schoemperlen
39695 S. Horse Run Dr.
Tucson, AZ 85739

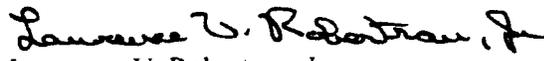
Re: Intervenor's Third Set of Data Requests to Goodman Water Company
Docket No. W-02500A-10-0382

Dear Mr. Wawrzyniak and Mr. Schoemperlen:

Enclosed you will find responses to Intervenor's Third Set of Data Requests in the above-referenced matter.

If you have any questions please feel free to contact me.

Sincerely,


Lawrence V. Robertson, Jr.

cc: Ayesha Vohra (via email only) AVohra@azcc.gov
Marlin Scott, Jr. (via email only) MScottJr@azcc.gov
Gary McMurry (via email only) GMcMurry@azcc.gov
Kelli Perry (via email only) Kelli@searsfinancial.net
Thomas J. Bourassa (via email only) tj114@cox.net
William A. Rigsby (via email only) brigsby@azruco.gov
Daniel Pozefsky (via email only) DPozefsky@azruco.gov

**GOODMAN WATER COMPANY, INC.'s RESPONSES TO
INTERVENOR'S THIRD SET OF DATA REQUESTS
DOCKET NO. W-02500A-10-0382
MARCH 7, 2011**

3.01 Please provide a narrative and details on Goodman Water Company's total water works capacity in terms of Equivalent Development/Dwelling Units (EDU's) in the Eagle Crest Ranch development.

RESPONSE: Attached as Appendix "A" is a copy of a "worksheet" previously prepared by WestLand Resources, Inc. which outlines the "Planning and Design Criteria EDU's," which were used in connection with the design of the water system for the Eagle Crest Ranch subdivision.

3.02 Please provide the dates for the earliest date of water service provided to lot numbers 478 to 590 and separately for lot numbers 591 to 617.

RESPONSE: The Company's records indicate that the earliest date for the physical delivery of water service to lots located within (i) lot numbers 478 to 590 and (ii) lot numbers 591 to 617 was February 22, 2007 in each instance.

3.03 Please provide a narrative of the extent of damage to the Goodman Water System that resulted from the recent cold weather. Indicate what water plants were affected, equipment that failed, estimated water lost to leakages, dates and time the failures occurred, time frame for when failure occurred and repairs were completed and associated costs for repairs.

RESPONSE: This information will be provided, when fully compiled, as a supplement to the Company's Responses to this Third Set of Data Requests.

3.04 Please provide a narrative for addressing the attached Water Plant #4 Upgrade for boosting Water Pressure to meet a Fire Flow Capacity of 1,600 GPM for the K Zone that was approved for Construction by the ADEQ on 5/26/04. Include (a) what entity requested the upgrade, (b) what was the total cost of the upgrade, (c) confirm the upgrade was constructed and installed in Water Plant #4, (d) Date the installation was completed and put in service.

RESPONSE: Attached as Appendix "B" are copies of (i) a September 2003 communication from Golder Ranch Fire District to D.R. Horton Homes and (ii) a June 28, 2004 communication from Golder Ranch Fire District to D.R. Horton Homes. These documents indicate that the subject upgrade at Water Plant #4 was occasioned by a 1,500 GPM fire flow capacity requirement enforced by the Golder Ranch Fire District against

3.04
Cont

D.R. Horton Homes in connection with homes to be located in the K-Zone. Attached as Appendix "C" is a copy of a September 19, 2003 Memorandum from WestLand Resources, Inc. to the Golder Ranch Fire District indicating that the Company's Water Plant #4 would require an upgrade of "an additional 500-gpm of capacity," in order for the water system to be able to achieve the 1,500 GPM fire flow requirement of the fire district. Attached as Appendix "D" are copies of a (i) May 26, 2004 Approval to Construct and a (ii) October 12, 2004 Approval of Construction, as issued by the Arizona Department of Environmental Quality in connection with the subject upgrade of facilities to Water Plant #4.

The total cost of such upgrade will be provided as a supplement to this data request response.

- 3.05 Please submit copies of the minutes of the Goodman Water Companies board of directors minutes since inception to the Administrative Law Judge assigned to the instant rate case on an in camera basis. We will ask the judge to determine what portions of the same are relevant to the issues to be resolved by the Commission.

RESPONSE: Attached as Appendix "E" is a copy of the Company's Notice of Transmittal of Documents to Assigned Administrative Law Judge for *In Camera* Review, as mailed to the Arizona Corporation Commission's Docket Control. The Company believes that this transmittal and contemporaneous submission of copies of the Minutes of meetings of Goodman Water Company's Shareholders and Board of Directors to Administrative Law Judge Jane L. Rodda is fully responsive to this data request.

Appendix “B”

GOLDER RANCH FIRE DISTRICT

Community Risk Prevention Division

Helping to make our community a better, safer place to live!



September 2003

Jim Morrison, Vice President Construction
D.R. Horton Homes
5255 E. Williams Circle
Suite 1030
Tucson, Arizona 85711

RE: Fire Code Review of Eagle Crest Ranch Development

Dear Mr. Morrison,

There have been recent discussions regarding some Fire Code deficiencies within the Eagle Crest Ranch Development. It is my intention to strive for fire code compliance and continue the good relations between Golder Ranch Fire District and D.R. Horton Homes. The two main issues at hand are as follows; fire flow requirements in relation to dwelling unit square footage, insufficient emergency secondary access. On the final plat for phase 2, I have also identified a concern regarding access for two separate cul-de-sacs with over 25 dwelling units each.

I. Fire Flow

- A. **UFC Appendix III-A / IFC Appendix B – Section 5.1 One- and Two-Family Dwellings** - The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire area which does not exceed 3,600 square feet shall be 1,000 gallons per minute. Fire flow and flow duration for dwellings having a fire area in excess of 3,600 square feet shall not be less than that specified in UFC Table A-III-A-1. **Exception** – A reduction of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.
- B. **UFC Appendix III-A – Section 4 Fire Area** - Defined as the total floor area of all floor levels within the exterior walls, and under horizontal projections of a roof of a building except as modified in Section 4. **Area Separation** – Portions of a building which are separated by one or more four-hour area separation walls constructed in accordance with the Building Code, without openings and provided with a 30-inch parapet, are allowed to be considered as separate fire areas.
- C. **Horizontal Projections of a Roof** – GRFD interpretation and clarification with the latest editions of the fire code - Covered patios and porches that are not open on two or more sides are also considered as Fire Area for defining fire flow requirements.
- D. **Garages** – Garages are included as Fire Area for defining fire flow requirements.
- E. **Fire Area Exceeding 3,600 Square Feet** – The next step in Table A-III-A-1 is 1,750 gallons per minute for buildings not exceeding 4,800 square feet.

GOLDER RANCH FIRE DISTRICT

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- F. **Water Development Plans** – The approved Water Development Plans were approved for 1,000 gpm fire flow and have notation that dwelling units exceeding 3,600 square feet in fire area shall have an automatic fire sprinkler system installed.
- G. **Situation** – The “*Kopopelli*” model consists of 3,682 square feet plus a 652 square foot garage and covered porches/patios open on two or more sides for a total of 4,334 square feet fire area. The “*Windsong*” model consists of 2,998 square feet plus a 676 square foot garage and covered porches/patios open on two or more sides for a total of 3,674 square feet fire area. Both of these models exceed 3,600 square feet and are required to have an automatic sprinkler system installed. D.R. Horton Homes has constructed and completed five (5) dwelling units that exceed 3,600 square feet in fire area, lots 147, 157, 162, 166, and 191. An automatic fire sprinkler system has not been installed in these dwelling units. A sixth dwelling unit exceeding 3,600 square feet is currently under construction, lot 193. An approved automatic sprinkler system has been installed for lot 193. Future lots might be sold and built upon with dwelling units exceeding 3,600 square feet.
- H. **Proposed Solution** – Jim Morrison, D.R. Horton Homes, has expressed the desire of D.R. Horton Homes to not have to install automatic sprinkler systems in the homes exceeding 3,600 square feet and has proposed to increase the available fire flow to 1,500 gallons per minute. Westland Resources has modeled the existing water system and submitted documentation that the system could handle an increase of 500 gpm.
- I. Dwelling units exceeding 3,600 square feet but not exceeding 4,800 square feet would require 1,750 gpm by Table A-III-A-1. Chief Fink and Fire Marshal Schoon have reviewed the situation, and due to an overall 500 gpm improvement for the entire development, agreed to allow the dwelling units to be constructed up to 4,800 in fire area, if 1,500 gpm is available.

GOLDER RANCH FIRE DISTRICT

Community Risk Prevention Division

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III. Long, Dead-End Roads with Single Point of Access

- A. **UFC 1998 Supplement / IFC Appendix D** – Developments of one- or two family dwellings where the number of dwelling units exceeds 30 shall be provided with a minimum of two separate and approved fire apparatus access roads. **Exception:** Where all dwelling units are protected by approved residential sprinkler systems, access from two directions may not be required. **Section 503.1.2 Additional Access.** The code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
- B. **Situation** – The latest Final Plat GRFD has reviewed shows two long dead-end cul-de-sacs with a single point of access for each one. One of these roadways, Diamond Bay Drive, serves 104 lots and the other, Mountain Shadow Drive, serves 45 lots.
- C. **Solution** - A second means of access shall be provided for each area or all dwelling units on these two points of access shall be constructed with an approved automatic sprinkler system.

GOLDER RANCH FIRE DISTRICT

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II. Secondary Access

- A. **UFC 1998 Supplement / IFC Appendix D**– Planned Area Developments where the number of dwelling units exceeds 25 shall be provided with separate and approved fire apparatus access roads. Exception – Where all dwelling units are protected by approved automatic sprinkler systems, access from two directions shall not be required. **Section 503.1.2 Additional access.** The code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.
- B. **Situation** - The Development Plan was shown with two main access points; these being from Oracle Road onto Eagle Crest Boulevard, and from SaddleBrooke Boulevard onto Eagle Crest Boulevard. The SaddleBrooke Boulevard access point would not be installed until such time that the commercial properties on the Northwest corner of the development were started. The development has more than 500 dwelling units planned. The majority of dwelling units were further identified to be accessible from a single main roadway, Eagle Heights Drive. The developer agreed to install a secondary access point adjacent to lot 148 that leads to Edwin Road and it would be gated to allow for emergency use only. Any locking mechanism shall be approved by GRFD and adhere to the standard for approved key boxes of locking mechanisms. The required unobstructed width of fire apparatus access roads is 20 feet. The standard for emergency fire apparatus roads is 14 feet.
- C. **Problem** – The secondary access has been completed. The gate is currently not locked. The gate is obstructed by a three foot high dirt and rock barrier placed between Edwin Road and the gate. The gate width is 14 feet; however, the access consistently narrows down to 9 feet wide as it meets with the development roadway adjacent to lot 148. This secondary access is unusable and does not meet the standard.
- D. **Solution** – Correct the width deficiency, remove the dirt and rock barrier, and install a Knox Lock. A Knox Lock Form will be provided.

GOLDER RANCH FIRE DISTRICT

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June 28, 2004

Leslie Schaefer
D R Horton
5255 E. Williams Circle
Suite 1030
Tucson, AZ 85711

RE: Eagle Crest Ranch, Phase III (Lots 378-419)

Dear MS. Schaefer,

I received your letter describing the road widths and possibly increasing the fire flow to 1,500 gpm in lieu of the required installation of automatic sprinkler systems. The road widths stated are minimum widths and as such do not offer anything to consider in the way of not enforcing the fire code with an alternative method. Your letter was bold enough to suggest that emergency apparatus could utilize a 10' right of way on both sides and illustrated it as a "clear area." With the installation of mailboxes, landscaping, and vehicles of homeowners parked in their driveways, I certainly can not see this as a "clear area."

D R Horton has stated in October 2003 they would increase the fire flow to 1,500 gpm because of constructing dwellings exceeding 3,600 square feet. The Fire Code requirement is 1,750 gpm for dwellings exceeding 3,600 square feet. GRFD agreed to accept an increase to 1,500 gpm for dwellings up to but not exceeding 4,800 square feet. As of June 2004, the improvements have not been accomplished.

Furthermore, the entire development is served by a single access point. An emergency secondary access was constructed in the cul-de-sac of Mountain Shadows Drive to meet the Fire Code. The Fire Code requires minimum clear width of 20 feet. GRFD agreed to accept a 14 foot clear width for the relatively short distance between Mountain Shadows Drive and Edwin Road. The developer constructed an access that is only 9 feet wide with one side having a vertical drop off into a drainage area. The access can not be utilized by fire apparatus. In the October 2003 meeting with D R Horton and GRFD, this was pointed out and was also to be corrected. As of June 2004, the access has not been corrected.

Increasing the available fire flow to 1,500 gpm, and correcting the existing secondary access is paramount to the continuation of this development. Golder Ranch Fire District has been patient and obviously willing to work with D R Horton; however, D R Horton has not been responsive to correcting the deficiencies. Lots 378-419 do require without exception, an additional secondary access or the installation of an automatic sprinkler system in each dwelling.

Sincerely,

Steven L. Schoon
Fire Marshal

Appendix “C”

MEMORANDUM

TO: John Fink, Golder Ranch Fire District

FROM: Kristen Whatley, E.I.T., Westland Resources, Inc.

CC: Mark Taylor, Westland Resources, Inc.
Doron Sears / Jim Shiner, Goodman Ranch Water Company
Pete Herder, DR Horton

DATE: September 19, 2003

RE: **EAGLE CREST FIRE FLOW MODELING
WESTLAND PROJECT NO. 292.02 A 8000**

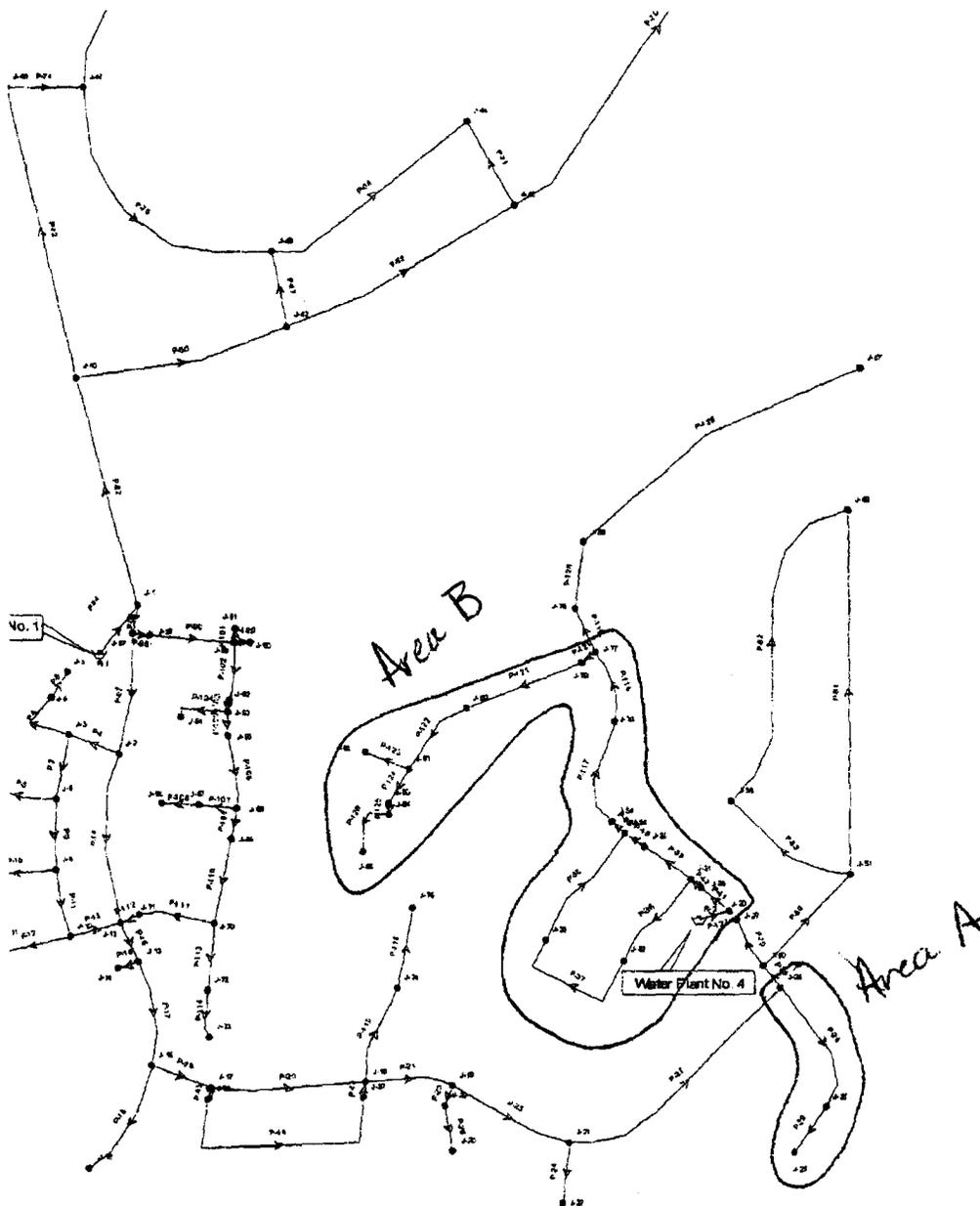


Westland Resources, Inc. (Westland) has conducted a fire flow analysis for two areas (A & B) within Eagle Crest Phase 2 as shown on Figure 1. The analysis provides information about the available fire flow to the project site, and includes all onsite water mains. The modeling is based on available information about the water system and the Eagle Crest Water System Master Plan, and has not been field verified for calibration. The model assumes that all line valves are fully open and the pipeline sizes are as shown on the base map provided for the system. A C value of 130 has been assumed for pipelines. The modeling assumes that all water system equipment is working properly.

The area marked A is capable of accepting the 1,500-gpm fire flow without reducing overall system pressure below 20 psi during peak day conditions. Modeling results for the fire flow analysis of area A are attached as Exhibits 1 and 2. All junctions within area marked B are capable of accepting the 1,500-gpm fire flow without reducing overall system pressure below 20 psi during peak day conditions. Modeling results for the fire flow analysis of area A are attached as Exhibits 3 and 5. Exhibit 4, Junction Report, shows the overall system pressures during a fire flow at J-84. J-84 controls the fire flow within Area B. Suction pressure at Water Plant No. 4 will significantly drop during a 1500-gpm fire flow, therefore the existing pumps should be analyzed for the proper TDH to deliver the required flow within the K-zone. In addition to modifying the existing pumps, an additional 500-gpm of capacity will need to be added to the existing pumps to provide for the 1,500-gpm fire flow. Pipeline velocities during the 1500-gpm fire flow were below 10 fps which is acceptable during a fire flow event.

Attachments: Figure 1
Exhibits 1-5

Figure 1
Scenario: 2B-WP1-FF



Appendix “D”

MAY 27 2004



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
CERTIFICATE OF APPROVAL TO CONSTRUCT
WATER FACILITIES

Page 1 Of 2

ADEQ File No: 20040238	
System Name: Goodman Water Co	System Number: 11130
Project Owner: D.R. Horton	
Address: 5255 E. Williams Cir., #1030, Tucson, AZ 85711	
Project Location: Catalina	County: Pinal
Description: BOOSTER STATION UPGRADES TO PROVIDE FOR A FIRE FLOW OF 1500 GPM AND TOTAL SUPPLY OF 1600 GPM AT THE EAGLE CREST WATER PLANT #4.	

Approval to construct the above-described facilities as represented in the approved documents on file with the Arizona Department of Environmental Quality is hereby given subject to provisions 1 through 5 continued on page 2 through 2

1. This project must be constructed in accordance with all applicable laws, including Title 49, Chapter 2, Article 9 of the Arizona Revised Statutes and Title 18, Chapter 4, Article 5 of the Arizona Administrative Code.
2. Upon completion of construction, the engineer shall fill out the Engineer's Certificate of Completion and forward it to the Central Regional Office located in Phoenix. If all requirements have been completed, that unit will issue a Certificate of Approval of Construction. R18-4-507(B), Ariz. Admin. Code. At the project owner's request, the Department may conduct the final inspection required pursuant to R18-4-507(B); such a request must be made in writing in accordance with the time requirements of R18-4-507(C), Ariz. Admin. Code.
3. This certificate will be void if construction has not started within one year after the Certificate of Approval to Construct is issued, there is a halt in construction of more than one year, or construction is not completed within three years of the approval date. Upon receipt of a written request for an extension of time, the Department may grant an extension of time; an extension of time must be in writing. R18-4-505(E), Ariz. Admin. Code.
4. Operation of a newly constructed facility shall not begin until a Certificate of Approval of Construction has been issued by the Department. R18-4-507(A), Ariz. Admin. Code.

Reviewed by JD1

By: Laura Magallon 5/27/04
 Aolad Hossain, P.E., Manager Date
 Technical Engineering Unit
 Water Quality Division

cc: File No: 20040238
 Regional Office: Central
 Owner: D.R. Horton
 County Health Department: Pinal
 Engineer: Westland Resources
 Planning and Zoning/Az Corp. Commission
 Engineering Review Database - Etr021

**CERTIFICATE OF APPROVAL TO CONSTRUCT
WATER FACILITIES**

ADEQ File No. 20040238

Page 2 of 2 : Provisions, continued

5. Pipes, fittings, valves, and any other material that comes in contact with drinking water shall comply with NSF Standard 61.



Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 W. Washington Street Phoenix, Arizona 85007

29202

APPROVAL OF CONSTRUCTION

Project Description: Booster station upgrades to provide a fireflow of 1500 gpm and total flow of 1600 gpm at the Eagle Crest Water Plant No. 4.

Location: Catalina, Pinal County

Project Owner: Goodman Water Company
Address: 5255 East Williams Circle, #1030, Tucson, Arizona 85711

Arizona Department of Environmental Quality (ADEQ) hereby issues an Approval of Construction for the above-described facility based on the following provisions of Arizona Administrative Code (A.A.C.) R18-4-507 et seq.

On May 26, 2004, ADEQ issued a Certificate of Approval to Construct for the referenced project.

On August 31, 2004, Kara D. Festa, P.E., certified the following:

- a final construction inspection was conducted on August 3, 2004;
- the referenced project was constructed according to the as-built and approved plans and specifications and ADEQ's Certificate of Approval to Construct;
- water system pressure and leakage tests were conducted on August 20, 2004 and the results were within the allowable leakage rates; and
- the system was disinfected according to an ADEQ-approved method.

Microbiological sample from the new piping was analyzed by Turner Laboratories, Inc., ADHS #AZ0066, on July 30, 2004. The sample result was negative for total coliform.

This Approval of Construction authorizes the owner to begin operating the above-described facilities as represented in the approved plan on file with the ADEQ. Be advised that A.A.C. R18-4-124 requires the owner of a public water system to maintain and operate all water production, treatment and distribution facilities in accordance with ADEQ Safe Drinking Water Rules.

jd1

PWS No.: 11-130

ADEQ Project No.: 20040238
LTF No.: 33904

Robert K. Adams 10/12/04
FOR Date Approved
Technical Engineering Unit
Drinking Water Section

c: DWCEU Facility File
TEU Construction File
CRO Approval of Construction File
Pinal County Health Department
Pinal County Planning & Zoning Department
AZ Corporation Commission
Engineer

Northern Regional Office
1515 East Cedar Avenue • Suite F • Flagstaff, AZ 86004
(520) 779-0313

Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

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APPENDIX C

LAWRENCE V. ROBERTSON, JR.
ATTORNEY AT LAW

P. O. BOX 1448
TUBAC, ARIZONA 85646

(520) 398-0411
FAX: (520) 398-0412
EMAIL: TUBACLAWYER@AOL.COM

OF COUNSEL TO
MUNGER CHADWICK, P.L.C.

ADMITTED TO PRACTICE IN:
ARIZONA, COLORADO, MONTANA,
NEVADA, TEXAS, WYOMING,
DISTRICT OF COLUMBIA

March 24, 2011

Lawrence Wawrzyniak
39485 S. Mountain Shadow Dr.
Tucson, AZ 85739

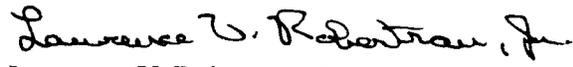
James Schoemperlen
39695 S. Horse Run Dr.
Tucson, AZ 85739

Re: Intervenor's Third Set of Data Requests to Goodman Water Company
Docket No. W-02500A-10-0382

Dear Mr. Wawrzyniak and Mr. Schoemperlen:

Enclosed is Goodman Water Company's Supplemental Response to Individual Intervenor's Data Requests 3.03 and 3.04.

Sincerely,


Lawrence V. Robertson, Jr.

cc: Ayesha Vohra (via email only) AVohra@azcc.gov
Marlin Scott, Jr. (via email only) MScottJr@azcc.gov
Gary McMurry (via email only) GMcMurry@azcc.gov
Kelli Perry (via email only) Kelli@searsfinancial.net
Thomas J. Bourassa (via email only) tjb114@cox.net
William A. Rigbsby (via email only) brigsby@azruco.gov
Daniel Pozefsky (via email only) DPozefsky@azruco.gov

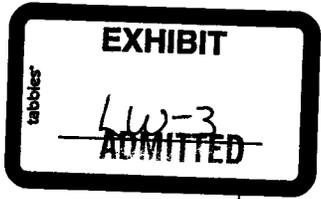
**GOODMAN WATER COMPANY, INC.'s SUPPLEMENTAL
RESPONSE TO INTERVENOR'S DATA REQUESTS 3.03 AND 3.04
DOCKET NO. W-02500A-10-0382
MARCH 24, 2011**

3.03 Please provide a narrative of the extent of damage to the Goodman Water System that resulted from the recent cold weather. Indicate what water plants were affected, equipment that failed, estimated water lost to leakages, dates and time the failures occurred, time frame for when failure occurred and repairs were completed and associated costs for repairs.

RESPONSE: See attached March 8, 2011 invoice from Smyth Steel Manufacturing.

X (3.04 Please provide a narrative for addressing the attached Water Plant #4 Upgrade for boosting Water Pressure to meet a Fire Flow Capacity of 1,600 GPM for the K Zone that was approved for Construction by the ADEQ on 5/26/04. Include (a) what entity requested the upgrade, (b) what was the total cost of the upgrade, (c) confirm the upgrade was constructed and installed in Water Plant #4, (d) Date the installation was completed and put in service.

RESPONSE: Further investigation upon this matter indicates that Goodman Water Company does not appear to have paid for the subject cost of upgrade to Water Plant #4.



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BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

**REBUTTAL TESTIMONY OF

LAWRENCE WAWRZYNIAK

IN RESPONSE TO TESTIMONY FROM:
MR. MARLIN SCOTT, JR. AND MR. GARY T. MCMURRY
OF THE
ARIZONA CORPORATION COMMISSION

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)**

May 2, 2011

1

2 **Q1. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A1. My name is Lawrence Wawrzyniak. My home address is 39485 S.
4 Mountain Shadow Dr., Tucson, AZ 85739.

5 **Q2. PLEASE INDICATE ANY UNIQUE QUALIFICATIONS.**

6 A2. I have been a member of the Eagle Crest Ranch Homeowners Advisory
7 Committee (HEAC) since 2006 and serving as HEAC Chairman in 2008
8 and 2009. I am currently as Chairman of the Landscape and
9 Maintenance Committee. The HEAC advises the Declarant controlled
10 HOA Board.

11 **Q3. ON WHOSE BEHALF ARE YOU TESTIFYING?**

12 A3. I am testifying on behalf of myself as an Intervenor in this case

13 **Q4. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
14 **CASE?**

15 A4. I am testifying in opposition to positions taken by the Arizona
16 Corporation Commission Staff (Staff).

17 **Q5. PLEASE SUMMARIZE THE AREAS WHERE YOU HAVE PROBLEMS WITH**
18 **POSITIONS TAKEN BY THE ARIZONA CORPORATION COMMISSION**
19 **STAFF.**

20 A5. I have three main objections to Staff's analysis of the GWC proposal:
21 commercial fire flow, calculated excess storage tank capacity and
22 summary of customer complaints.

23 **COMMERCIAL FIRE FLOW**

24 I disagree with Staff's (Mr. Marlin Scott, Jr.) acceptance of the
25 Commercial Fire Flow requirements as indicated by GWC. Why should
26 Homeowners have to pay for the commercial fire flow rate of 2,000
27 GPM vs. the residential fire flow rate of 1,000 GPM as shown in the
28 system analysis, page 4; item 2. The Commercial Property is owned by
29 EC Development whose principle owners are also the principle owners

1 requirement is just another example of Excess Capacity. It is my
2 opinion that the owners of the commercial property should bear the
3 cost of the commercial fire flow rates and not the Homeowners.

4 I have shown in my initial testimony (page 5, line 22), that the
5 acceptable residential fire flow requirement is 1,000 GPM at 20 PSI.

6 Staff should also treat the South K Zone 1,500 GPM Fire Flow rate as
7 deduction when considering capacity rather than an addition. The
8 modifications to Water Plant No. 4 that increased the South K Zone to
9 1,500 GPM fire flow rate was done to the benefit of the Builder and
10 part owner of GWC. This plant modification allowed DR Horton to
11 avoid installing Automatic Fire Sprinkler Systems in 22 homes. For
12 these 22 homes (2.3% of the estimated 957 total potential lots in ECR)
13 See Appendix A1, the rest of the homeowners have to pay for the
14 extra 60,000 gallons of Fire Flow water storage. The overhead in
15 storage requirements caused by this higher fire flow rate presents an
16 inequity between homeowners and commercial customers with no
17 benefit to the homeowners.

18 Staff has indicated that the current system, even with the 2,000 GPM
19 commercial fire flow, can now support 3,000 connections or 343%
20 (3,000/875) in excess capacity. When considering the estimated
21 commercial load of 331 additional connections there is still 249%
22 (3,000/ (875+331)) in excess capacity. If you were to base the
23 connections based only on residential fire flow, the overall number of
24 connections increases to 3,521 ((= 930,000-120,000)/230). But the real
25 difference when comparing fire flow rates is the effect it has on the
26 storage tank requirements.

27 When using the residential fire flow rate of 1,000 GPM x 2 hours or
28 120,000 GPD and the five year demand of 201,250 GPD (=230
29 GPD/connection x 875 connections(Staff's five year projected number
30 of homes built)), the total is 321,250 GPD still leaves 78,750 gallons or
31 19.7% excess capacity in the original storage tank. The conclusion
32 reached with Residential Fire Flow is that the entire second 530,000
33 gallon storage tank is excess capacity.

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EXCESS STORAGE TANK CAPACITY

Regarding Staff's (Mr. Marlin Scott, Jr.), Plant-in-Service Adjustments in page 5, section E.1, Staff used the Commercial Fire Flow requirement of 240,000 GPD when calculating total storage tank capacity and then double counts the fire flow storage requirements by adding another 180,000 gallons for the K-Zone customers served by Water Plant #4 in Page 5, section E.4. Is Staff inferring that the total required storage capacity for fire flow is 420,000 GPD or is this, an error?

Water Plant #4 was modified at the request of DR Horton to avoid having to modify an initial 6 homes that were constructed without automatic fire sprinkler systems. Another 16 homes were added to this group for a total of 22 homes. GWC should be penalized for allowing a part owner of GWC to create this intergenerational inequity by having the extra 60,000 GPD removed from total GPD estimates when calculating excess tank storage capacity.

I suggest Staff revisit their calculations of total Fire Flow Storage Capacity using the Residential Fire Flow rate of 1,000 GPD for 2 hours since we do not have any commercial development.

The resulting calculation would show the five year demand at 201,250 GPD (=23- GPD/connection x 875 connections) plus residential fire flow (120,000 GPD) totals 321,250 GPD with 78,750 GPD reserve. They have to conclude that the second 530,000 gallon tank is 100% excess capacity. Therefore, not only should the cost of the tank be deducted as excess capacity but the entire water plant #3 cost which GWC reported as \$542,430.84 for the total cost of the 530,000 gallon tank and related equipment in Staff's Data Request Number 3, response MSJ-3.9.

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CUSTOMER COMPLAINTS

In Staff's (Mr. Gary T. McMurry) summary of customer complaints, Page 4 Section III, Lines 9 to 14, it was stated that there were 287 opinions opposed to the rate increase between January 1, 2008 and March 7, 2011. The ACC Document Control office chose to enter multiple homeowner filings under one document number. In the time period of October 1, 2010 to January 6, 2011 alone, the actual number of opinions opposing the rate increase is 479. See Appendix A2.

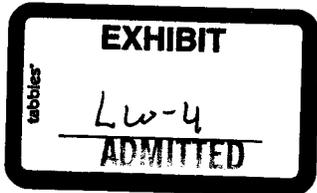
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APPENDIX A

Street Name	Street	Lot	House Type	Sprinkler System		Water	Fire	Building	House
	Address	Number	K or W	YES	NO	Meter	Zone	Phase	Count
S Mountain Shadow Dr	40046	143	K		X	5/8"	J	I	1
	40126	147	K		X	5/8"	J	I	1
	40146	148	W		X	5/8"	J	I	1
	40051	154	K		X	5/8"	J	I	1
	40031	155	K		X	5/8"	J	I	1
	39991	157	K		X	5/8"	J	1	1
	39692	360	K		X	5/8"	K	II-B	1
	39682	361	W		X	5/8"	K	II-B	1
	39572	364	K		X	5/8"	K	II-B	1
	39683	369	K		X	5/8"	K	II-B	1
	39661	370	K		X	5/8"	K	II-B	1
	39508	366	W		X	5/8"	K	II-B	1
	Fire Code-One Entrance St.	39484	419	W	X		3/4"	K	III-B
Fire Code-One Entrance St.	39448	416	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39424	414	K	X		1"	K	III-B	1
Fire Code-One Entrance St.	39376	410	K	X		1"	K	III-B	1
Fire Code-One Entrance St.	39316	406	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39280	403	W	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39268	402	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39256	401	W	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39244	400	W	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39232	399	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39249	394	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39327	388	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39371	384	W	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39413	381	K	X		3/4"	K	III-B	1
Fire Code-One Entrance St.	39473	379	W	X		1"	K	III-B	1
Rock Ledge Loop	60954	193	W		X	5/8"	K	I	1
	60942	191	K		X	5/8"	K	I	1
	60870	188	K		X	5/8"	K	I	1
	60852	186	K		X	5/8"	K	I	1
	60835	161	W		X	5/8"	K	I	1
	60841	162	W		X	5/8"	K	I	1
	60847	163	W		X	5/8"	K	I	1
	60853	164	K		X	5/8"	K	I	1
	60859	165	K		X	5/8"	K	I	1
	60865	166	K		X	5/8"	K	I	1
Eagle Mountain Dr	60825	591	K	X		3/4"	K	IV-B	1
	60837	592	K	X		3/4"	K	IV-B	1
	60889	596	K	X		3/4"	K	IV-B	1
	60985	603	K	X		3/4"	K	IV-B Model	1
	60902	611	K	X		3/4"	K	IV-B	1
	60616	724	K	X		3/4"	K	IV-B	1
Eagle Ridge Dr	60922	918	K	X		3/4"	K	V-B	1
	60755	877	W	X		3/4"	K	V-B	1
	60417	893	K	X		3/4"	K	V-B	1
	60441	892	K	X		3/4"	K	V-B	1
Running Roses Lane	39070	751	W	X		3/4"	J	V-A	1
	39091	756	W	X		3/4"	J	V-A	1
Quick Trot Dr	39136	867	W	X		3/4"	J	V-A Model	1
House Type:									
K=Kopopelli 4,334 sq.ft.									
W=Windsong 3,674 sq. ft.									
TOTAL LARGE HOUSES									50

Note: All houses in Phase IV-C require Fire Sprinkler due to Fire Code for One Entrance St.

Date	ACC Document Number	Number of individual Documents
10/5/2010	118603	1
10/8/2010	118702	1
10/8/2010	118706	1
10/12/2010	118741	1
10/12/2010	118749	17
10/12/2010	118750	1
10/13/2010	118756	1
10/13/2010	118763	4
10/13/2010	118768	1
10/13/2010	118770	19
10/13/2010	118778	3
10/14/2010	118803	208
10/14/2010	118807	4
10/14/2010	118812	4
10/18/2010	118880	96
10/18/2010	118887	1
10/18/2010	118888	1
10/19/2010	118908	8
10/20/2010	118977	7
10/21/2010	118991	1
10/22/2010	119026	26
10/26/2010	119096	8
10/27/2010	119130	1
10/28/2010	119162	1
10/29/2010	119205	1
11/1/2010	119252	20
11/3/2010	119771	11
11/16/2010	120051	1
11/29/2010	120313	21
11/30/2010	120357	1
12/9/2010	120626	1
12/10/2010	120641	1
12/10/2010	120642	1
12/12/2010	120643	3
12/20/2010	120914	1
1/7/2011	121859	1
	TOTAL	479



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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

- GARY PIERCE, Chairman**
- BOB STUMP**
- SANDRA D. KENNEDY**
- PAUL NEWMAN**
- BRENDA BURNS**

IN THE MATTER OF THE APPLICATION OF)
 GOODMAN WATER COMPANY, AN ARIZONA)
 CORPORATION, FOR (i) A DETERMINATION)
 OF THE FAIR VALUE OF ITS UTILITY PLANT)
 AND PROPERTY AND (ii) AN INCREASE IN)
 ITS WATER RATES AND CHARGES FOR)
UTILITY SERVICE BASED THEREON.)

DOCKET NO: W-02500A-10-0382

**NOTICE OF FILING OF
 CORRECTIONS TO PREPARED
 DIRECT TESTIMONY OF
 LAWRENCE WAWRZYNIAK**

Attached for filing in the above-captioned and docketed proceeding are corrected pages 3, 4, 7 and 8 to the Direct Testimony of Lawrence Wawrzyniak. Copies of the attached corrected pages are concurrently being mailed to each of the parties in the aforesaid proceeding.

RESPECTFULLY SUBMITTED this 10th day of August, 2011.

Lawrence Wawrzyniak

39485 S. Mountain Shadow Dr.
 Tucson, AZ 85739
 Phone: (520) 825-6672
 E-mail: LWawrzyniak05@comcast.net

ORIGINAL and Thirteen (13)
 copies of the foregoing to be
 filed the 21st day of March 2011
 with Docket Control.

Docket Control
 Arizona Corporation Commission
 1200 West Washington Street
 Phoenix, AZ 85007

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A copy of the foregoing Notice will
be emailed or mailed this same date:

Jane L. Rodda, Administrative Law Judge
Hearing Division
Arizona Corporation Commission
400 West Congress, Suite 218
Tucson, AZ 85701

Janice Alward, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Ayesha Vohra
Attorney, Legal Division
Arizona Corporation Commission
1200 W. Washington Street
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Steven Olea, Director
Utilities Division
Arizona Corporation Commission
1200 W. Washington Street
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Daniel Pozefsky
Chief Counsel
Residential Utility Consumer Office
1110 West Washington, Suite 220
Phoenix, AZ 85007

Lawrence V. Robertson, Jr., Esq.
Goodman Water Company
P.O. Box 1448
Tubac, AZ 85646

James Schoemperlen
39695 S. Horse Run Dr.
Tucson, AZ 85739

1 **I. INTRODUCTION, QUALIFICATIONS AND PURPOSE**

2 **Q1. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A1. My name is Lawrence Wawrzyniak. My home address is 39485 S. Mountain
4 Shadow Dr., Tucson, AZ 85739.

5
6 **Q2. PLEASE INDICATE ANY UNIQUE QUALIFICATIONS.**

7 A2. I have been a member of the Eagle Crest Ranch Homeowners Advisory Committee
8 (HEAC) since 2006 and serving as HEAC Chairman in 2008 and 2009. I am
9 currently as Chairman of the Landscape and Maintenance Committee. The HEAC
10 advises the Declarant controlled HOA Board.

11
12 **Q3. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

13 A3. I reside in the Eagle Crest Ranch Sub-Division (ECRS) and as a customer of
14 Goodman Water Company (GWC) represent myself as a ratepayer. I will testify
15 against the water rate increase.

16
17 **II. OVERVIEW OF INTERVENOR'S TESTIMONY**

18 **Q4. WHAT ARE THE ISSUES AS YOU PERCEIVE THEM?**

19 A4. I see two issues:

- 20 1. GWC took a business risk to build infrastructure to support Phase V-A, V-B and
21 IV-C homes and expansion to be built outside of the ECRS which resulted in excess
22 capacity to serve the current homeowners of Eagle Crest Ranch. Home Building
23 Phases I, II A-B, III-A-B, and IV-A-B (total of 626 lots or 65% of ECRS lots) were
24 approved for service by the Arizona Department of Environmental Quality (ADEQ)
25 using existing water plant infrastructure in place since the last rate review set forth
26 in ACC Docket No. W-02500A-06-0281 Decision No 69404. GWC also wants us
27 to pay for support of future development of Commercial property (332 EDU) within
28 ECRS by calculating storage capacity based on 2,000 gpm commercial fire flow vs.
29 1000 gpm residential fire flow rates. The ACC has stated that the GWC system has
30 a capacity to support 1,800 homes. (See ACC Document 116091, as A1 attached).
31 ECRS has a platted capacity of 891, a potential 17 non-platted lot in Phase IV-A, 10

1 non-platted lots in Phase V-A and one lot number 487 not shown on the Plat Maps
2 along with an additional 38 non-platted lots in Phase 6 for a total of 957 lots and
3 73.6 acres of Commercial property in Tracks A-F and N. (See ECRS Lot Display
4 Map, as A2 attached). The fact that the market has stalled and Goodman was left
5 with overbuilt infrastructure should not result in the current rate payers having to
6 support it or pay for depreciation on excess capacity. It amounts to a financial
7 bailout.

- 8
- 9 2. The increase in water rates will significantly increase the disparity of water rates for
10 homeowners and their surrounding neighboring communities which affect home
11 resale values. GWC is the highest cost water service in Pinal County for company's
12 with 500-1000 customers according to a 2009 Water Infrastructure Finance
13 Authority of Arizona (WIFA) Report Exhibit E, Page 28. (See WIFA Report pages
14 15-22, 25, 28, 30 as A3 attached).

15

16 **Q5. WHAT WAS THE HISTORY OF THE PHASED DEVELOPMENT OF**
17 **EAGLE CREST RANCH SUBDIVISION?**

- 18 A5. Goodman Ranch Associates, ECRS's initial developer obtained Plat Approval on
19 10/24/2000, shown as Tracks A-N. See Final Plat Eagle Crest Ranch Tracks A
20 through N, as A4 attached) I have also attached a Lot display map of ECRS. (See
21 Eagle Crest Ranch Lot Display, as A2 attached. note: the lot summary incorrectly
22 shows a count of 45 extra 45 ft .lots in Phase IV-B)

23

24 Correspondingly, GWC also looked to build the water plant in Phases. They filed a
25 plan with the Arizona Corporation Commission on December 20, 2001 under
26 Docket W-2500A-02-0435.

27

28 D. R. Horton Homes obtained Final Plat Approval from Pinal County on 12/18/01
29 as the Owner of Phase I Lots 1-218. (See A5 attached). Building of homes began
30 and 24 homes were occupied by year end 2002 followed by 105 homes in 2003, 75
31 homes in 2004, 7 homes in 2005, 5 homes in 2006 and 2 homes in 2007. The 2006

1 **Q8. PLEASE CONTINUE WITH YOUR HISTORY OF THE PHASED BUILD**
2 **PROCESS.**

3
4 A8. All of the homes in Phase III-A were occupied by the end of 2005. Phase III-B saw
5 15 homes occupied by year end 2005 and the remaining 27 homes were occupied
6 by year end 2006. (See Eagle Crest Ranch Phase III-A lots, as A14 and III-B, as
7 A15 attached).

8
9 Since the Phase III-B homes were located on a dead end cul-de-sac. GRFD required
10 that Automatic Fire Sprinkler systems be installed in all homes in this Phase
11 regardless of size. (See GRFD Letter last paragraph dated June 28, 2004, as A12
12 attached).

13
14 The Final Plat for ECRS Phase IV-A was approved by Pinal County on 9/11/06. It
15 included Lots 478-480, 490-505, 515-617. (See Final Plat for Eagle Crest Ranch
16 Phase IV-A, as A16 attached). This Phase was split into IV-A Lots 478-480, 490-
17 505, 515-590 that were on 45 ft. and 60 ft. lots and IV-B Lots 591-617 being 70 ft.
18 lots. There were 62 homes occupied in Phase IV-A and 7 homes in Phase IV-B by
19 Year End 2007. This made up 49% of the 140 total platted lots in this Phase. (See
20 Eagle Crest Ranch Phase IV-A, as A17 and IV-B, as A18 attached).

21
22 **Q9. WHY DO YOU BELIEVE WATER PLANT #3 IS EXCESS CAPACITY?**

23
24 A9. It is my opinion that GWC had sufficient capacity to serve Phase IV-A and IV-B as
25 GWC's first date of water service was 2/22/2007 as indicated in their response to
26 Intervenor data Request No 3.02.(See A18A attached) GWC finally received an
27 Approval of Construction on 5/2/2007 in ADEQ File No. 20060126. GWC did not
28 receive Approval of Construction on Water Plant #3 until 1/22/08 in ADEQ File
29 No. 20060727. To this point in time a total of 626 lots or 65% of ECRS lots of
30 which 545 of these lots were built and occupied leaving 81 lots to be built which
31 were included in the existing water plant capacity before Water Plant #3. It should

1 be noted that of the remaining 81 not occupied lots at year end 2007, five (5) were
2 devoted to sales and eighteen (18) were not platted leaving a net 58 available lots.

3
4 The way the Phased build process in ECRS was occurring, it is my opinion that
5 Water Plant #3 was built to solely support the future development of Building
6 Phases V-A, V-B and IV-C, future Commercial property development (332 EDUs)
7 and another potential development Eagle Crest Ranch West (ECR West) as
8 described in ACC Docket No. W-02500A-05-0443, Decision No. 68444 dated
9 2/6/2006. GWC acknowledges expanding the water storage tank in Water Plant #3
10 by 190,000 gallons for this project. GWC accepted the risk of the cost (\$73, 250)
11 for this extra capacity but not the risk for even building Water Plant #3. I question
12 whether a prudent business decision was made based on whether or not they would
13 have the added revenue stream from completed houses to pay for it. GWC withdrew
14 their application for ECR West on 4/2/2010 as motioned in ACC Docket No. W-
15 2500A-05-0443, Document No. 109740. In support of this, I also reference ACC
16 Document No. 116091 (Sec A.1) where the ACC Staff determined that "this water
17 plant site would not benefit the entire water system".

18
19 **Q10. PLEASE CONTINUE WITH THE HISTORY OF THE PHASED BUILD**
20 **PROCESS.**

21
22 A10. The Final Plat for Phase V was approved by Pinal County on 5/22/07. (See Final
23 Plat for Eagle Crest Ranch Phase V as A19 attached). It included Lots 719-816,
24 823, and 828-920. This Phase has been divided into Phasc V-A and V-B where
25 Phase V-A is composed of 60 ft. lots numbered 729-869 at the base of the hill (See
26 A20 attached) and Phase V-B are 70 ft. lots numbered 870-920 at the top of the hill
27 where Water Plant # 3 is located. (See A21 attached) D. R. Horton built three
28 models in Phase V-A on Lot Numbers 866-868 in late 2007 which were
29 subsequently sold. All together only 16 lots out of 202 or 8% of Phase V-A & V-B
30 are built. D. R Horton sold the remaining Lots and Declarant Rights to CRVI H-
31 AZCO, LLC in the fourth quarter of 2008. CRVI H-AZCO, LLC has subsequently

1 **Q8. PLEASE CONTINUE WITH YOUR HISTORY OF THE PHASED BUILD**
2 **PROCESS.**

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5 15 homes occupied by year end 2005 and the remaining 27 homes were occupied
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7 A15 attached).

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9 Since the Phase III-B homes were located on a dead end cul-de-sac. GRFD required
10 that Automatic Fire Sprinkler systems be installed in all homes in this Phase
11 regardless of size. (See GRFD Letter last paragraph dated June 28, 2004, as A12
12 attached).

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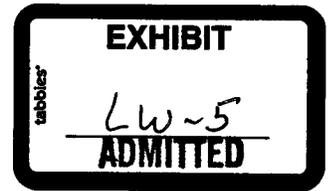
23
24 A9. It is my opinion that GWC had sufficient capacity to serve Phase IV-A and IV-B as
25 GWC's first date of water service was 2/22/2007 as indicated in their response to
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31 AZCO, LLC in the fourth quarter of 2008. CRVI H-AZCO, LLC has subsequently



BEFORE THE ARIZONA CORPORATION COMMISSION

**IN THE MATTER OF THE
APPLICATION OF GOODMAN WATER
CORPORATION, FOR (i) A
DETERMINATION OF THE FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND (ii) AN INCREASE IN
ITS WATER RATES AND CHARGES
FOR UTILITY SERVICE BASED
THEREON.**

DOCKET NO: W-02500A-10-0382

**DIRECT TESTIMONY IN SUPPORT OF
SETTLEMENT AGREEMENT**

From

Lawrence Wawrzyniak

(RATE BASE, INCOME STATEMENT AND RATE DESIGN)

October 4, 2011

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I. INTRODUCTION, QUALIFICATIONS AND PURPOSE

Q1. PLEASE STATE YOUR NAME AND ADDRESS.

A1. My name is Lawrence Wawrzyniak. My home address is 39485 S. Mountain Shadow Dr. Tucson, AZ 85739

Q2. DO YOU LIVE IN THE EAGLE CREST RANCH SUBDIVISION?

A2. Yes

Q3. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A3. The purpose of this testimony is to support the settlement agreement between Goodman Water Company, the Residential Utility Consumer Office (RUCO) and Intervenors Lawrence Wawrzyniak and James Schoemperlen.

Q4. PLEASE TELL US WHY YOU ARE SUPPORTING THIS AGREEMENT.

A4. This Rate Case's basic issues revolve around the final build out of the Goodman Water Company's (GWC) plant to support the entire planned community of both Homes and Commercial Business. GWC is the sole provider of water to Eagle Crest Ranch and other than the commercial property; they have no other source of new customers. It has been testified by GWC that they have capacity to support 1,327 connections; 959 homes and 368 equivalent commercial connections. The ACC Staff has testified that their calculations show GWC can support 933 connections. Based on their five year forecast of 875 connections, they have determined that almost all of GWC's plant is used and useful. They elected to exclude

sections of future underground hook up pipes devoted mostly to the commercial property. The issue that there will be approximately 700 connections by year end 2011 leaves open the concern over $1,327 - 700 = 627$ available connections. What happened was, the economy stopped and what may have been a reasonable business decision at one point became a questionable business decision. If the development had built out during the time from the last Rate Case in 2006, GWC would be earning more than sufficient revenue to meet the original ACC approved business plan. GWC's willingness to freeze the Fair Value Rate Base at today's current values helps to remove the tension over the business decision altogether.

The Owners of GWC are the Owners of EC Development, the developers of Eagle Crest Ranch and prior business partners with DR Horton the major Builder of the development. There is inherent distrust among the ratepayers towards the Owners as the ratepayers felt deceived when they purchased their homes because of the many hats the GWC Owners were wearing.

Friction is also generated from the rules used by the ACC Staff that if you can use pre-built plant within five years it is ok for ratepayers to pay for it now. With the economy stalled, the only gleaming hope for improvement is time.

Our community is already hampered by the high water rates compared to surrounding communities. To experience the sudden and sharp increase in rates as originally requested by GWC and slightly modified by the ACC Staff would trigger immediate hate and resentment by the ratepayers. This could result in both radical and potential harmful counter reactions that may lead to a boycott of any future home sales or attempts to further develop Eagle Crest Ranch. The ripple effect on water costs to support the community's common areas would put added pressure on HOA Assessments, again that could lead to adverse reactions (i.e. Turn off the park water and let the land return to a natural environment).

The Owners of GWC have come forward to recognize that a total win at this time would really be nothing more than a loss. From an Intervenor's perspective, it's like battling cancer. Do nothing and you're sure to die or seek therapy, prolong death and hope for a remission and maybe a cure. I would tend to seek therapy and hope for a better tomorrow. Perhaps a miracle would happen, but miracles are risky at best. Unless we attempt to work together there will be no progress. This settlement is a negotiation of likes and dislikes. Some wish the Water Plant to magically transform itself to a lesser state. Some wish it to go away entirely and be rescued by another suitor. Others wish for a smooth transition that doesn't create a shock to the quality of life. We are stuck with property values hindered by the cost of water and a depressed economy. The prospect of still higher costs a tough pill to accept. GWC has stepped up to adsorb the Legal Costs and provide a reasonable time delay to allow the community to grow. The phase in of an increase without recovery of interest helps to lessen the impact while compensating GWC for some the plant being used since the last rate case but short of the plant built for the future. The Owners of GWC also want to put forth a willingness to work together going forward and put the adversarial attitudes aside. This will help towards mending the community relationships.

I support this settlement with guarded reservation based on a better tomorrow that will protect this community from implosion while the economy tries to repair itself. This Settlement provides the foundation for resuming the debate over the same issues raised in this rate case should the future not improve as hoped. However, if the relations between the GWC and the Ratepayers improve as promised, the future may prove to be more hospitable, regardless of the outcome.

Goodman Water Company
 Settlement Proposal

W-02500A-10-0382

Meter Size	Current GWC Fixed Rate	Proposed Settlement Rates			Proposed ACC Staff Rebuttal year 1	Proposed ACC Staff Rebuttal year 2	Proposed ACC Staff Rebuttal year 3	ACC Staff Rebuttal 1st yr.	ACC Staff Rebuttal 2nd yr.	ACC Staff Rebuttal 3rd yr.	ACC Rebuttal 3 yr. Total	ACC Rebuttal Increase	% Increase ACC Rebuttal
		year 1	year 2	year 3									
5/8 inch	42.20	40.94	43.19	45.25	42.50	45.00	45.25	42.50	45.00	45.25	2,904.48	79.56	2.8%
3/4 inch	63.30	61.41	64.79	67.88	63.75	68.00	71.00	63.75	68.00	71.00	3,911.04	147.84	3.9%
1 inch	105.50	102.35	107.98	113.13	106.00	113.00	118.00	106.00	113.00	118.00	6,018.72	217.32	3.7%
2 inch	339.68	327.52	345.52	362.00	213.00	225.00	235.00	213.00	225.00	235.00			
Commodity Rates by Meter Size													
Current GWC Rates	3.95												
5/8 inch & 3/4 inch	5.91												
over 9,000	7.11												
Proposed New Rates													
5/8 inch & 3/4 inch		4.140	4.350	4.560	4.300	4.500	4.700	4.300	4.500	4.700	4.300	4.500	
over 9,000		8.410	8.830	9.300	8.700	9.100	9.500	8.700	9.100	9.500	8.700	9.100	
Remains the Same	5.91	8.410	8.830	9.300	8.700	9.100	9.500	8.700	9.100	9.500	8.700	9.100	
1 inch	7.11	9.481	9.993	9.993	10.500	11.000	11.500	10.500	11.000	11.500	10.500	11.000	
Remains the Same	5.91	8.410	8.830	9.300	8.700	9.100	9.500	8.700	9.100	9.500	8.700	9.100	
2 inch	7.11	9.481	9.993	9.993	10.500	11.000	11.500	10.500	11.000	11.500	10.500	11.000	
Estimated Water Bill without taxes													
Meter Size	Average Usage	Current GWC Total	Proposed Settlement 1st yr.	Proposed Settlement 2nd yr.	Proposed Settlement 3rd yr.	Proposed Settlement 3 yr Total	ACC Rebuttal 1st yr.	ACC Rebuttal 2nd yr.	ACC Rebuttal 3rd yr.	ACC Rebuttal 3 yr. Total	ACC Rebuttal Increase	% Increase ACC Rebuttal	
5/8 inch	5520 gallons	66.98	74.55	78.49	82.37	2,824.92	77.32	81.43	83.29	2,904.48	79.56	2.8%	
3/4 inch	6028 gallons	91.09	99.30	104.58	109.72	3,763.20	103.00	109.05	113.87	3,911.04	147.84	3.9%	
1 inch	6028 gallons	141.13	153.05	161.21	169.19	5,801.40	158.44	167.85	175.27	6,018.72	217.32	3.7%	
ACC Conditions:													
NO EXCESS CAPACITY		2411.28 (413.64)	17.2%										
ACCEPT LAND REVALUATION		3222.24 (473.96)	14.8%										
Phased in rates where Year 1 Revenue is \$116,041 (5.59% Rate of Return) Year 2 Revenue is \$135,425 (6.53% Rate of Return) Year 3 Revenue is \$154,809 (7.45% Rate of Return)													
Total Revenue Increase is \$400,000 vs Settlement Revenue Increase of \$138,000													
Fair Value Rate Base Increased to: \$2,077,253													

LW-9
ADMITTED

tabbles

Settlement Yr 1
Proposed Water Cost
Eagle Crest Ranch HOA

Location	Read Date	Previous Reading	Current Reading	Gallons Used	Water Cost	Muni	Gross Sales Tax	Net Sales Tax	Sales Tax Percent	Total Billed	Base Meter Cost	Water Use Rate 2" per K 1 >45K \$9.41	Water Use Rate 2" per K 1 >45K \$9.41	Water Use Rate 1" per K >22.5K \$9.481	Water Use Rate 1" per K >22.5K \$9.481	Water Cost Only	Water & Meter Cost	Total Cost/ 6.7% Tax	Variance
Monument Track F Z meter 100142A	1/19/2011	5312400	590500	66,100	769.87	0.44	59.72	59.28	0.0770	929.59	327.52	378.45	219.01	1,020.10	2,429.68	597.46	924.98	956.85	167.26
	2/19/2011	5307500	5907300	226,800	1,688.23	1.47	147.83	146.16	0.0770	2,043.66	327.52	378.45	1,733.68	2,102.40	2,429.68	602.10	2,819.40	2,819.40	572.54
	3/19/2011	5693200	5963200	55,900	52.90	0.36	52.90	52.90	0.0770	736.99	327.52	378.45	1,733.68	481.79	877.20	481.79	803.31	877.20	136.11
	4/19/2011	5693200	5781000	117,800	1,123.24	0.77	97.29	95.49	0.0770	1,338.51	327.52	378.45	1,733.68	1,068.67	1,398.19	1,068.67	1,398.19	1,504.67	294.17
	5/19/2011	5761000	6051800	219,800	2,111.07	1.65	155.01	153.21	0.0770	2,143.48	327.52	378.45	1,932.23	2,519.26	2,846.78	2,519.26	2,846.78	3,057.97	664.89
	6/19/2011	6816000	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	7/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	8/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	9/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	10/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	11/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	12/19/2011	6365600	6365600	46,800	366.93	0.35	36.69	36.48	0.0770	214.48	327.52	378.45	1,932.23	2,310.68	2,638.20	2,310.68	2,638.20	2,843.19	628.11
	1/19/2011	6095300	6108750	13,420	162.28	0.09	14.13	14.04	0.0770	186.41	102.35	112.86	112.86	189.23	22.19	211.41	112.86	231.93	35.52
	2/19/2011	6133550	6133550	24,840	263.47	0.16	20.45	20.29	0.0770	283.92	102.35	189.23	22.19	144.40	333.62	435.97	338.14	54.22	54.22
	3/19/2011	6171320	6171320	37,730	355.12	0.25	27.59	27.34	0.0770	382.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	4/19/2011	6228370	6228370	57,090	492.48	0.37	38.28	37.82	0.0770	492.49	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	5/19/2011	6262970	6262970	63,580	543.43	0.42	43.59	43.13	0.0770	543.43	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	6/19/2011	6282960	6282960	63,580	543.43	0.42	43.59	43.13	0.0770	543.43	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	7/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	8/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	9/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	10/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	11/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	12/19/2011	6352960	6352960	70,340	617.71	0.48	50.18	49.62	0.0770	617.71	102.35	189.23	22.19	327.57	516.79	619.14	619.14	657.25	174.76
	1/19/2011	603800	603800	7,910	152.25	0.05	11.77	11.72	0.0770	164.02	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	2/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	3/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	4/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	5/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	6/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	7/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	8/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	9/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	10/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	11/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	12/19/2011	609600	609600	4,930	94.64	0.03	10.43	10.37	0.0770	145.04	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	1/19/2011	741560	757570	16,010	200.69	0.10	15.55	15.45	0.0770	216.24	102.35	134.64	134.64	189.23	23.61	212.83	315.18	339.67	54.60
	2/19/2011	757570	757570	24,990	264.54	0.16	20.53	20.37	0.0770	285.07	102.35	189.23	23.61	888.32	1,078.54	1,078.54	1,480.89	1,272.65	287.78
	3/19/2011	782560	782560	119,300	913.75	0.76	71.12	70.36	0.0770	994.87	102.35	189.23	23.61	1,655.67	2,054.90	2,054.90	2,572.86	550.75	
	4/19/2011	898860	898860	119,300	913.75	0.76	71.12	70.36	0.0770	994.87	102.35	189.23	23.61	1,655.67	2,054.90	2,054.90	2,572.86	550.75	
	5/19/2011	118140	118140	35,000	327.35	0.23	25.44	25.21	0.0770	352.79	102.35	189.23	118.51	307.74	410.09	307.74	410.09	441.95	89.16
	6/19/2011	118140	118140	35,000	327.35	0.23	25.44	25.21	0.0770	352.79	102.35	189.23	118.51	307.74	410.09	307.74	410.09	441.95	89.16
	7/19/2011	118140	118140	35,000	327.35	0.23	25.44	25.21	0.0770	352.79	102.35	189.23	118.51	307.74	410.09	307.74	410.09	441.95	89.16
	8/19/2011	1215590	1215590	40,880	389.16	0.27	28.70	28.43	0.0770	397.86	102.35	189.23	161.32	181.32	283.67	181.32	283.67	308.71	94.72
	9/19/2011	1234650	1234650	19,070	218.20	0.12	16.92	16.80	0.0770	235.12	102.35	189.23	161.32	160.36	282.13	160.36	282.13	283.14	16.02
	10/19/2011	1234650	1234650	19,070	218.20	0.12	16.92	16.80	0.0770	235.12	102.35	189.23	161.32	160.36	282.13	160.36	282.13	283.14	16.02
	11/19/2011	1251070	1251070	17,000	210.11	0.12	16.30	16.19	0.0770	228.41	102.35	189.23	161.32	148.95	251.21	148.95	251.21	270.73	44.32
	12/19/2011	1251070	1251070	17,000	210.11	0.12	16.30	16.19	0.0770	228.41	102.35	189.23	161.32	148.95	251.21	148.95	251.21	270.73	44.32
	1/19/2011	603800	603800	7,910	152.25	0.05	11.77	11.72	0.0770	164.02	102.35	66.52	66.52	189.23	78.41	41.46	143.61	154.99	17.97
	2/19/2011	609600	609600	4,930	94.64	0.03													



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OF COUNSEL TO
MUNGER CHADWICK, P.L.C.

ADMITTED TO PRACTICE IN:
ARIZONA, COLORADO, MONTANA,
NEVADA, TEXAS, WYOMING,
DISTRICT OF COLUMBIA

June 23, 2011

Lawrence Wawrzyniak
39485 S. Mountain Shadow Dr.
Tucson, AZ 85739

James Schoemperlen
39695 S. Horse Run Dr.
Tucson, AZ 85739

Re: Intervenor's Fifth Set of Data Requests to Goodman Water Company
Docket No. W-02500A-10-0382

Dear Mr. Wawrzyniak and Mr. Schoemperlen:

Pursuant to the request of Administrative Law Judge Jane L. Rodda during the June 14, 2011 Pre-Hearing Conference in Docket No. W-02500A-10-0382, Goodman Water Company submits this letter and the attached spread sheet as a supplement to the Company's previous May 19, 2011 and May 23, 2011 responses to the Individual Intervenors' Fifth Set of Data Requests. Also, attached are copies of documentation supporting information depicted in the spread sheet.

The Company continues to take the position(s) set forth in the Company's May 19, 2011 and May 23, 2011 responses to the data requests herein question. In addition, and as a part of this supplement to its previous responses, the Company sets forth the following additional positions.

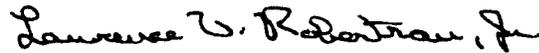
First, the NARUC audit guideline upon which the Individual Intervenors (and perhaps other parties) rely is not dispositive of the ratemaking standard to be used by the Commission in determining the value to be assigned to the four (4) parcels of land upon which the Company's Water Plant #s 1, 2, 3 and 4 facilities are located. The aforesaid NARUC audit guideline has never been promulgated as a regulation by the Commission; and, the Company is not aware of any rate case in which the Commission has issued a decision utilizing the aforesaid NARUC guideline for the purpose advocated by the Individual Intervenors (and perhaps certain other parties) in this proceeding.

Dear Mr. Wawrzyniak and Mr. Schoemperlen:
June 23, 2011
Page 2 of 2

Second, and assuming arguendo that the "book value" of the land in question as recorded in the books of the Company's "affiliate(s)" is to be used for ratemaking purposes, it is the position of the Company that the "book value" to be used is one which takes into account and fully reflects all costs that were incurred by the "affiliate(s)" in order to make the land suitable for use by the Company in connection with its water utility operations. In that regard, since the parcels upon which the facilities comprising Water Plant #s 1, 2, 3 and 4 are located were never separate parcels prior to the legal conveyance of the same to the Company in 2008, any attempt to assign a "book value" to them must be derived by using a combination of (i) the gross acquisition cost of the total acreage acquired for the Phase(s) of Eagle Crest Ranch within which a given Water Plant parcel is located, and (ii) the total land development or land improvement cost associated with the phase in question. In that manner, it is possible to derive an "improved book value" for each of the four (4) Water Plant parcels herein question; and, the values so derived are depicted in the "Improved Book Value" column on the attached spread sheet. However, as indicated in its Rebuttal Testimony, the Company believes that the land value(s) for the four (4) parcels which should be used are those determined in the appraisal prepared by John Ferenchak, which was filed as a part of the Company's Rebuttal Testimony, and are reflected in the last column on the attached spread sheet.

In connection with the foregoing, the Company believes that the enclosed spread sheet and supporting documentation are fully responsive to both (i) Judge Rodda's request during the June 14, 2011 Pre-Hearing Conference and (ii) the Individual Intervenors' Fifth Set of Data Requests.

Sincerely,



Lawrence V. Robertson, Jr.

cc: Hon. Jane L. Rodda, w-enclosures
All parties, w-enclosures

TUCSON- SCHEDULE A- LAND DEVELOPMENT COSTS

Subdivision: Eagle Crest

12/5/02

Number of Lots: Phase I

218

Description	A	B	C	D	E
	Original Budget	Actual Costs as of 12/5/02	Cost-to-Complete as of 12/5/02	Total Project Budget B + C	Variance D - A
1. LAND					
Land	700,000	700,000			
Land Closing Costs		1,061			
Profit from Sale of Lots (B/A/D1)		213,199			
Legal	15,000	114,450			
Environmental					
Escrow Fee's\Broker					
Cost-to-Complete as 12/5/02			82,046		
SUB-TOTAL	\$715,000	\$1,028,710	\$82,046	\$1,110,756	\$395,756
2. ENGINEERING/DESIGN					
Engineering\ Design	385,000	262,219			
Land Planner					
Surveying and Topo					
Preliminary Plat					
Final Plat					
Construction Drawings					
Staking		53,985			
Soils	10,000	35,133			
Landscape Architect	10,000	47,396			
Blueprints\ Copies	150	0			
Cost-to-Complete as 12/5/02			75,000		
SUB-TOTAL	\$405,150	\$418,734	\$75,000	\$493,734	\$88,584
3. LAND DEVELOPMENT FEES AND PERMITS					
Land Development Fees and Permits					
Permit					
Bond Premiums		14,708			
HOA Fee's					
HOA Set-up	1,500	6,948			
DRE Fees					
MCRV Fees					
Inspections	25,000	57,937			
County Plan Check Fees	2,500				
Cost-to-Complete as 12/5/02					
SUB-TOTAL	\$29,000	\$79,674	\$0	\$79,674	\$50,674
4. LAND PRE-DEVELOPMENT WORK					
Land Pre-Development Work					
Nppo and Plant Salvage	10,000				
Endangered Species Studies					
404 Studies and Mitigation	10,000				
Environmental Studies and Mitigation	5,000	14,455			
Archeology Studies and Mitigation					
Traffic and Engineering Studies					
Cost-to-Complete as 12/5/02					
SUB-TOTAL	\$25,000	\$14,455	\$0	\$14,455	(\$10,545)

Description	A	B	C	D	E
	Original Budget	Actual Costs as of 12/5/02	Cost-to-Complete as of 12/5/02	Total Project Budget B + C	Variance D - A
5. EXCAVATION AND GRADING					
Excavation and Grading	4,264,912	4,126,432			
Mass Grading					
Street Grading					
Curb and Gutter Grading					
Erosion Control					
Retaining Walls					
Back-Fill For Erosion Control and Walls					
Silt Fencing					
Contingency	150,000	44,810			
Cost-to-Complete as 12/5/02			513,555		
SUB-TOTAL	\$4,414,912	\$4,171,242	\$513,555	\$4,684,797	\$269,885
6. PAVING					
Paving					
Curb and Gutter					
Alley					
Streets					
Cost-to-Complete as 12/5/02					
SUB-TOTAL	\$0	\$0	\$0	\$0	\$0
7. WATER AND DRAINAGE					
Water & Drainage					
Storm Drain					
Sewer					
Water Distribution System-Central	1,010,000	840,238			
Main Water System					
Cost-to-Complete as 12/5/02			69,762		
SUB-TOTAL	\$1,010,000	\$840,238	\$69,762	\$910,000	(\$100,000)
8. UTILITIES					
Utilities					
Joint Trench & Backfill	150,000				
Street Lights					
Utility Deposits(Refundable)	16,050	30,384			
Utility Deposits(Non-Refundable)					
Cost-to-Complete as 12/5/02					
SUB-TOTAL	\$166,050	\$30,384	\$0	\$30,384	(\$135,666)
9. ENTRIES, MONUMENTS AND THEME WALLS					
Entries, Monuments and Theme Walls					
Monuments	100,000	112,544			
Signs					
Theme Walls	50,000	10,152			
Retaining Walls		112,772			
Cost-to-Complete as 12/5/02			150,000		
SUB-TOTAL	\$150,000	\$235,567	\$150,000	\$385,567	\$235,567

Description	A	B	C	D	E
	Original Budget	Actual Costs as of 12/5/02	Cost-to-Complete as of 12/5/02	Total Project Budget	Variance
				B + C	D - A
10. OFFSITES START-UP					
Offsites					
Start-Up					
Temp. Electric	10,000	8,801			
Signs		514			
Temp. Water					
Cost-to-Complete as 12/5/02			25,000		
SUB-TOTAL	\$10,000	\$9,314	\$25,000	\$34,314	\$24,314
11. INTEREST EXPENSE	\$75,000			\$0	(\$75,000)
12. PROPERTY TAXES (1)		\$4,495		\$4,495	\$4,495
13. LANDSCAPING					
Landscaping					
Entries					
Common Areas	125,000				
Cost-to-Complete as 12/5/02					
SUB-TOTAL	\$125,000	\$0	\$0	\$0	(\$125,000)
14. DEVELOPMENT FEES					
Pete Herder & Terramar	65,400	59,240			
Cost-to-Complete as 12/5/02			26,160		
SUB-TOTAL	\$65,400	\$59,240	\$26,160	\$85,400	\$20,000
TOTAL	\$7,190,512	\$6,892,053	\$941,523	7,833,576	\$713,569
Contingency as of 1/3/03			150,000		
GRAND TOTAL	\$7,190,512	\$6,892,053	\$1,091,523	* 7,983,576	\$793,064

TOTAL PROJECT BUDGET	\$7,983,576
LESS LAND INCLUDED	(700,000)
NET DEVELOPMENT COSTS	<u>\$7,283,576</u>

Phase 3A

	ORIGINAL BUDGET	REVISED BUDGET	ACTUAL COSTS	VARIANCE
Phase:	3A		as of	Revised Budget less Actual Costs
Lot #'s:			7/31/2006	
# of lots:	58			
Old Cost Code	JDE	45' LOTS		

Old
Cost Code

Cost Code

<u>ENGINEERING COSTS</u>					
9101	CFPO Survey	10020	\$870.00	\$1,092.40	\$1,092.40
9105	Platting and Zoning	12050	\$34,800.00	\$33,208.96	\$33,208.96
9110	Wellsite Design Fee	12100			
9115	OPW Non-contract	12010	\$5,800.00	\$658.83	\$658.83
9120	Lift Station Design Fee	12220			
9125	Submittal/Review Fees	17010	\$4,350.00	\$3,721.56	\$3,721.56
9130	Construction Permit Fees	17140	\$1,450.00	\$1,326.60	\$1,326.60
9135	Soils Reports	10100	\$2,320.00	\$1,305.00	\$1,305.00
9140	Blueprint Costs	28220	\$1,740.00		
9145	CCR's and Legal	10070	\$4,350.00	\$4,557.73	\$4,557.73
	Total Engineering Costs		\$55,680.00	\$45,871.08	\$45,871.08
<u>LAND DEVELOPMENT COSTS</u>					
9400	Survey	12020	\$34,220.00	\$39,396.54	\$39,396.54
9405	Clearing and Removal	20020	\$10,200.00	\$2,578.00	\$2,578.00
9410	Overlot Grading	20080	\$99,100.00	\$103,254.12	\$103,254.12
9415	Pad Grading	20090	\$21,979.00	\$22,922.11	\$22,922.11
9420	Soils Testing	20015	\$8,700.00	\$11,600.00	\$11,600.00
9425	SWPP	20130	\$4,350.00	\$11,151.12	\$11,151.12
9430	Sewer	21000	\$130,556.00	\$136,778.78	\$136,778.78
9433	Booster Upgrade / Fire Flow	23015			
9434	Well and Booster Electronics	23020	\$37,700.00	\$49,578.13	\$49,578.13
9435	Water	23000	\$92,123.00	\$96,514.81	\$96,514.81
9436	Goodman Water Fees	17290	\$2,935.00	\$2,935.00	\$2,935.00
9437	Water Support (Westland)	17300	\$4,350.00	\$7,285.82	\$7,285.82
9440	Water Inspection Fee (Westland)	17310	\$2,320.00	\$1,765.64	\$1,765.64
9445	Utilities Trenching	25050	\$17,400.00	\$27,501.90	\$27,501.90
9450	Electric Conduit	25080	\$31,900.00	\$52,320.30	\$52,320.30
9465	Paving	24050	\$231,573.00	\$242,610.69	\$242,610.69
9470	Drainage and Rip Rap	22000	\$11,358.00	\$11,899.63	\$11,899.63
9480	Landscaping	27025	\$8,700.00	\$5,478.22	\$5,478.22
9481	Revegetation / Hydroseed	28170	\$26,100.00		
9490	Detention Basin Fencing	26004	\$2,500.00		
9495	Verdura Walls & engineering	26090	\$75,000.00		
9500	House & Trailer Demolition	20040	\$23,200.00	\$17,722.16	\$17,722.16
9510	Phone/Gas/Electric Deposit	25100	\$4,350.00	\$4,350.00	\$4,350.00
9515	Phone/Gas/Electric Refund				
9520	Construction Management	12070	\$26,100.00	\$26,100.00	\$26,100.00
	Development Costs		\$906,714.00	\$873,742.77	\$873,742.77
9550	Sales Tax	28250	\$43,500.00	\$12,397.43	\$12,397.43
9975	5% Contingency	19999	\$45,336.00	\$97,124.58	\$84,521.71
9975	ROW Permit	19999			
	Total Land Development Costs	17160	\$995,550.00	\$983,264.78	\$970,661.91
	TOTAL COSTS		\$1,051,230.00	\$1,029,135.86	\$1,016,532.99
	COST PER LOT			\$17,743.72	

Phase 3B

	ORIGINAL BUDGET	REVISED BUDGET	ACTUAL COSTS	VARIANCE
Phase:		3B	as of	Revised Budget
Lot #s:			7/31/2006	less Actual Costs
# of lots:		42		

Old
Cost Code

JDE
Cost Code

70' LOTS

ENGINEERING COSTS

9101	CFPO Survey	10020	\$630.00	\$823.60	\$823.60	0.00
9105	Platting and Zoning	12050	\$25,200.00	\$24,078.31	\$24,078.31	0.00
9110	Wellsite Design Fee	12100	\$0.00			0.00
9115	OPW Non-contract	12010	\$4,200.00	\$193.19	\$193.19	0.00
9120	Lift Station Design Fee	12220	\$0.00			0.00
9125	Submittal/Review Fees	17010	\$3,150.00	\$2,760.44	\$2,760.44	0.00
9130	Construction Permit Fees	17140	\$1,050.00	\$960.65	\$960.65	0.00
9135	Soils Reports	10100	\$1,680.00	\$945.00	\$945.00	0.00
9140	Blueprint Costs	28220	\$1,260.00			0.00
9145	CCR's and Legal	10070	\$3,150.00	\$3,309.87	\$3,309.87	0.00
	Total Engineering Costs		\$40,320.00	\$33,071.06	\$33,071.06	0.00

LAND DEVELOPMENT COSTS

9400	Survey	12020	\$24,780.00	\$26,754.00	\$26,754.00	0.00
9405	Clearing and Removal	20020	\$25,700.00	\$22,306.72	\$22,306.72	0.00
9410	Overlot Grading	20080	\$677,630.00	\$642,981.53	\$642,981.53	0.00
9415	Pad Grading	20090	\$15,916.00	\$16,598.78	\$16,598.78	0.00
9420	Soils Testing	20015	\$6,300.00	\$8,261.56	\$8,261.56	0.00
9425	SWPP	20130	\$3,150.00	\$7,119.81	\$7,119.81	0.00
9430	Sewer	21000	\$83,886.00	\$87,804.80	\$87,804.80	0.00
9433	Booster Upgrade / Fire Flow	23015	\$18,000.00			0.00
9434	Well and Booster Electronics	23020	\$27,300.00	\$45,792.85	\$45,792.85	0.00
9435	Water	23000	\$62,935.00	\$65,634.92	\$65,634.92	0.00
9436	Goodman Water Fees	17290	\$2,125.00	\$1,942.65	\$1,942.65	0.00
9437	Water Support (Westland)	17300	\$3,150.00	\$4,885.48	\$4,885.48	0.00
9440	Water Inspection Fee (Westli)	17310	\$1,680.00	\$1,195.34	\$1,195.34	0.00
9445	Utilities Trenching	25050	\$12,600.00	\$15,518.42	\$15,518.42	0.00
9450	Electric Conduit	25080	\$23,100.00	\$42,397.61	\$42,397.61	0.00
9465	Paving	24050	\$167,690.00	\$175,683.11	\$175,683.11	0.00
9470	Drainage and Rip Rap	22000	\$0.00			0.00
9480	Landscaping	27025	\$6,300.00	\$3,966.98	\$3,966.98	0.00
9481	Revegetation / Hydroseed	28170	\$18,900.00			0.00
9490	Detention Basin Fencing	26004	\$5,000.00			0.00
9495	Verdura Walls & engineering	26090	\$0.00			0.00
9500	House & Trailer Demolition	20040	\$0.00			0.00
9505	New Offsite Well (AA McDani)	23080				0.00
9510	Phone/Gas/Electric Deposit	25100	\$3,150.00	\$3,150.00	\$3,150.00	0.00
9515	Phone/Gas/Electric Refund	25101				0.00
9520	Construction Management	12070	\$18,900.00	\$18,900.00	\$18,900.00	0.00
	Development Costs		\$1,208,192.00	\$1,190,974.56	\$1,190,974.56	0.00
9550	Sales Tax	28250	\$31,500.00	\$23,077.17	\$23,077.17	0.00
9975	5% Contingency	19999	\$60,410.00	\$71,355.09	\$52,589.83	18,765.26
9975	ROW Permit	17160				
	Total Land Development Costs		\$1,300,102.00	\$1,285,406.82	\$1,266,641.56	18,765.26

TOTAL COSTS

\$1,340,422.00 \$1,318,477.88 \$1,299,712.62 18,765.26

COST PER LOT

\$31,914.81 \$31,392.33

EAGLE CREST RANCH - 101 Lots-October 31, 2007

11/15/2007

PHASE 4C		ORIGINAL BUDGET	REVISED BUDGET	CURRENT BUDGET	OPEN COMMITTED	ACTUAL COSTS	AVAILABLE FUNDS NOT COMMITTED
JDE: 94299000	Phase:		per 1/19/2008	4C			current budget
	Lot #'s:	4/15/2005	revised 8/22/05	10/31/2007	10/31/2007	10/31/2007	less open commit
	# of lots:		per Budget Review	101			less actual costs
	DRH			48 LOTS			
	Cost Code						
ENGINEERING COSTS							
CFPO Survey	10020	\$840.00	\$836.20	\$301.74			
Plotting and Zoning	12050	\$48,300.00	\$08,136.01	\$70,725.33		\$301.74	
Final Plat	12050					\$70,725.33	
Website Design Fee	12100	\$11,700.00	\$11,734.80	\$8,775.41			
OPW Non-contract	12810	\$2,100.00	\$2,095.50	\$0,642.66		\$8,775.41	
UA Station Design Fee	12270	\$3,150.00	\$7,384.32	\$7,878.40		\$0,642.66	
Submittal/Review Fees	17010	\$8,300.00	\$8,532.61	\$0,171.48		\$7,878.40	
Construction Permit Fees/State Land (10060)	17140	\$2,100.00	\$50,000.00	\$19,011.04		\$0,171.48	
Bonds	14000			\$21,965.41		\$19,011.04	
Permit/Bonds Fees	17990			\$7,814.70		\$21,965.41	\$854.60
Soils Reports	10100	\$1,200.00	\$1,257.30	\$1,280.00		\$7,814.70	
Blueprint Costs	28220	\$2,100.00	\$2,085.60	\$23.54		\$1,280.00	
CCR's and Legal	10070	\$4,200.00	\$4,181.00	\$5,432.28		\$23.54	
Total Engineering Costs		\$82,118.99	\$182,287.24	\$158,102.03		\$157,447.46	\$854.60
LAND DEVELOPMENT COSTS							
Survey	12020	\$52,500.00	\$60,488.76	\$73,628.48		\$0,805.00	\$80,023.40
Clearing and Removal	20020	\$17,008.00	\$7,721.00	\$7,721.00		\$306.05	\$7,334.99
Overall Grading	20080	\$121,211.00	\$447,382.32	\$440,162.32		\$22,456.13	\$426,704.19
Pad Grading	20090	\$40,525.00	\$43,564.69	\$43,564.59		\$2,178.20	\$41,386.39
Soils Testing	20015	\$14,700.00	\$14,668.50	\$18,500.00		\$1,051.00	\$17,449.00
SWPP	20130	\$7,500.00	\$10,606.80	\$38,238.33		\$228.20	\$38,010.13
Sewer	21000	\$247,403.00	\$313,117.68	\$313,117.68		\$15,058.88	\$298,058.80
Sewer Lift Station	21080	\$607,750.00	\$728,376.00	\$757,572.22		\$104,019.61	\$653,552.61
Booster Upgrade / Fire Flow	23015						
Well and Booster Electronics	23020						
Water	23000	\$106,687.00	\$100,208.60	\$180,305.31		\$8,460.42	\$171,844.89
Water Plant #3	23005						
EG West Upgrade	23010	\$46,200.00					
Goodman Water Review Fees	17280	\$3,150.00	\$3,130.00				
Water Sys Support (Westland) & telemetry	17300	\$7,580.00	\$7,500.00	\$020.98			\$030.88
Water Inspection Fee (Westland)	17310	\$5,040.00	\$5,040.00	\$7,045.09		\$1,047.71	\$6,092.80
Utilities Trenching	23050	\$34,670.00					\$34,670.00
Electric Conduit	26080	\$89,468.00	\$129,533.00	\$143,738.00		\$10,507.18	\$133,230.82
Paving	24050	\$341,782.00	\$724,089.32	\$730,691.07		\$185,615.19	\$545,075.88
Drainage	22000	\$274,472.00	\$6,742.00	\$0,742.00		\$497.10	\$6,244.90
Landscaping	27025	\$10,500.00	\$10,500.00	\$10,500.00			\$10,500.00
Revegetation / Hydroseed	28170	\$10,000.00	\$10,000.00	\$10,000.00			\$10,000.00
Detention Basin Fencing	28004	\$8,300.00	\$8,300.00				
Verdura Walls & engineering	26090	\$218,000.00					
Phone/Gas/Electric Deposit	26100	\$7,575.00	\$7,575.00	\$7,575.00			\$7,575.00
Eagle Crest Boulevard	24070						
Construction Management	32070	\$45,450.00	\$45,450.00	\$45,450.00		\$2,085.46	\$43,364.54
Development Costs		\$2,374,281.08	\$2,781,383.45	\$2,883,845.78		\$369,843.14	\$2,513,992.64
Sales Tax	24075	\$58,202.00	\$106,010.08	\$111,950.81		\$11,401.00	\$100,549.81
5% Contingency	19999	\$118,714.05	\$118,714.05	\$16,872.72			\$101,841.33
10% LA Station Contingency	19999	\$60,775.00					\$60,775.00
10% Water Plant #3 Contingency	19999	\$31,502.00					\$31,502.00
Total Land Development Costs		\$2,643,894.06	\$3,006,108.48	\$2,997,678.29	\$371,044.20	\$2,684,326.70	\$37,208.39
TOTAL COSTS		\$2,725,704.05	\$3,158,378.42	\$3,150,780.34	\$371,044.20	\$2,741,773.15	\$37,962.99
COST PER LOT		\$28,907.17	\$31,271.05	\$31,195.84			
Land Seller Reimbursement							
(Original budget less current budget) divided by 2							

EAGLE CREST RANCH - 113 Lot-October 31, 2007

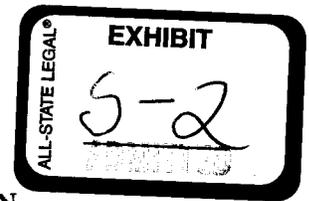
11/15/2007

		A	B	C	D	E	F
PHASE 4A		ORIGINAL BUDGET	REVISED BUDGET	CURRENT BUDGET	OPEN COMMITTED	ACTUAL COSTS	C-D-E-F AVAILABLE FUNDS NOT COMMITTED
JDE: 00249000	Phase:		per 1/19/2006	4A			Current budget
113 lots	Date:	4/15/2005	revised 8/22/06	10/31/2007	10/31/2007	10/31/2007	less open commit
	# of lots:		per Terramar	113			less actual costs
	ORH			45 LOTS			
	Cost Code						
ENGINEERING COSTS							
CFPO Survey	10070	\$940.00	\$937.00	\$337.60		\$337.60	
Plotting and Zoning	12060	\$54,050.00	\$73,098.05	\$86,052.09		\$81,812.00	\$4,240.00
Final Plat	12050						
Water Plant Design Fee	12100	\$13,100.00	\$13,129.20	\$9,805.38		\$8,805.38	
OPW Non-contract	12010	\$2,350.00	\$2,344.50	\$9,451.01		\$8,451.01	
LMI Station Design Fee	12220	\$3,525.00	\$3,201.55	\$8,020.03		\$8,020.03	
Submittal/Review Fees	17010	\$7,050.00	\$7,308.74	\$12,000.47		\$12,009.47	
Construction Permit Fees	17140	\$2,350.00	\$70,000.00	\$3,704.55		\$3,704.55	
Bonds	14000			\$23,142.77		\$22,084.37	\$1,058.40
Soils Reports	10100	\$1,410.00	\$1,400.70	\$1,410.00		\$1,410.00	
Blueprint Costs	20220	\$2,350.00	\$2,344.50	\$100.04		\$106.04	
Legal DRE	10030						
CCF's and Legal	10070	\$4,700.00	\$4,689.00	\$4,680.00		\$4,687.71	\$1.29
Total Engineering Costs		\$91,885.00	\$190,420.04	\$180,376.64		\$158,105.95	\$4,419.99
LAND DEVELOPMENT COSTS							
Survey	12020	\$50,750.00	\$67,607.59	\$78,752.56		\$78,752.56	
Clearing and Removal	20020	\$40,124.00	\$43,415.00	\$43,415.00	\$2,170.34	\$41,244.74	
Overall Grading	20080	\$758,397.00	\$834,700.17	\$868,093.37	\$43,437.44	\$826,656.63	
Pad Grading	20090	\$52,168.00	\$55,083.30	\$55,503.30	\$2,737.79	\$53,145.67	
Soils Testing	20015	\$10,450.00	\$10,411.50	\$29,434.00		\$28,434.00	
SWPP	20130	\$0,460.00	\$21,142.23	\$07,249.00		\$07,328.50	
Sewer	21000	\$309,227.00	\$400,206.57	\$403,242.12	\$24,444.38	\$408,707.74	
Sewer Lift Station	21000						
Booster Upgrade / Fire Flow	23016						
Wall and Booster Electronics	23020						
Water	23008	\$382,070.00	\$451,717.00	\$400,710.40	\$24,514.17	\$465,743.00	\$452.94
Water Plant #1	23005	\$519,008.00	\$801,425.75	\$697,470.01	\$113,000.44	\$904,371.47	
EC West Upgrade	23018	\$51,700.00					
Goodman Water Review Fees	17290	\$3,525.00	\$3,525.00				
Water Sys Support (Wastland) & Telemetry	17300	\$8,460.00	\$8,460.00	\$1,214.03		\$1,214.03	
Water Inspection Fee (Wastland)	17310	\$5,640.00	\$5,640.00	\$20,793.51	\$0,660.57	\$20,123.94	
Utilities Tranching	26050	\$02,281.00					
Electric Conduit	26080	\$144,506.00	\$215,034.15	\$244,000.00	\$11,004.07	\$232,201.73	
Paving	24030	\$449,823.00	\$1,400,720.85	\$1,400,510.19	\$06,201.15	\$1,394,249.04	
Street Signs	24000						
Drainage	22000	\$408,722.00	\$55,316.94	\$71,300.00	\$3,565.30	\$67,740.81	
Landscaping	27025	\$11,750.00	\$18,000.00	\$15,000.00	\$760.50	\$10,472.71	\$3,760.79
Revegetation / Hydroseed	26170	\$15,000.00	\$11,750.00	\$20,102.50	\$42.00	\$20,060.57	
Orientation Back Fencing	26004	\$7,050.00	\$7,050.00				
Vertical Walls & engineering	26090	\$08,000.00					
Phone/Gas/Electric Deposit	26100	\$8,475.00	\$0,475.00	\$27,014.00	\$0,475.00	\$10,438.82	
Eagle Crest Boulevard	24070	\$384,070.00	\$425,807.61	\$474,393.00	\$34,240.00	\$390,154.70	
Construction Management	12070	\$50,850.00	\$50,850.00	\$50,850.00	\$2,544.57	\$48,305.63	
Development Costs		\$4,005,177.00	\$4,886,934.50	\$5,218,323.00	\$387,572.15	\$4,844,536.49	\$4,213.33
Sales Tax	24075	\$150,707.00	\$172,512.54	\$203,595.00	\$8,480.00	\$197,120.18	
5% Contingency	10000	\$200,259.00	\$200,259.00	\$18,937.00		\$17,000.00	\$18,865.79
10% LMI Station Contingency	10000						
10% Water Plant #1 Contingency	10000	\$35,285.00					
Total Land Development Costs		\$4,400,519.00	\$5,228,896.19	\$5,430,852.00	\$374,041.11	\$5,041,710.64	\$23,071.12
TOTAL COSTS							
		\$4,492,403.00	\$5,420,115.93	\$5,599,376.64	\$374,041.11	\$5,197,836.69	\$27,498.81
COST PER LOT							
		\$39,755.78	\$47,985.03	\$49,522.00			
Land Seller Reimbursement							
(Original budget less current budget) divided by 2							

EAGLE CREST RANCH - 27 Lots - October 31, 2007

11/15/2007

		A	B	C	D	E	F
		ORIGINAL BUDGET	REVISED BUDGET	CURRENT BUDGET	OPEN COMMITTED	ACTUAL COSTS	AVAILABLE FUNDS NOT COMMITTED
PHASE 4B							
JOE: 92259000	Phase:		per 1/18/2008	4B			current budget
	Date:	4/15/2005	revised 6/22/08	10/31/2007	10/31/2007	10/31/2007	less open comm
	# of lots:		Per Tractuar	27			less actual costs
	DRH			70' LOTS			
	Cost Code						
ENGINEERING COSTS							
CFPO Survey	10020	\$220.00	\$224.00	\$50.00		\$80.66	
Planning and Zoning	12050	\$12,050.00	\$17,074.94	\$19,647.79		\$18,647.78	
Final Plat	12060						
Wellbore Design Fee	12100	\$3,000.00	\$3,138.00	\$2,607.09		\$2,607.09	
OPW Non-contract	12010	\$550.00	\$560.00	\$2,182.52		\$2,182.52	
Lot Station Design Fee	12220	\$825.00	\$1,073.33	\$2,132.06		\$2,132.06	
Submittal/Review Fees	17010	\$1,650.00	\$1,745.75	\$2,238.95		\$2,238.95	
Construction Permit Fees	17140	\$550.00	\$18,000.00	\$207.01		\$207.01	
Bonds	14000			\$5,513.02		\$5,471.27	\$42.55
Soils Reports	10180	\$330.00	\$338.00	\$330.00		\$330.00	
Blueprint Costs	28220	\$550.00	\$560.00	\$90.70		\$90.70	
CCR's and Legal	10070	\$1,100.00	\$1,120.00	\$770.31		\$770.51	
Total Engineering Costs		\$21,806.00	\$45,320.02	\$44,480.80		\$34,038.23	\$42.63
LAND DEVELOPMENT COSTS							
Survey	12020	\$13,750.00	\$16,187.65	\$10,100.00		\$18,106.90	
Clearing and Removal	20020	\$0,412.00	\$10,373.33	\$9,373.57		\$9,854.43	
Overall Grading	20080	\$177,000.00	\$189,443.07	\$189,040.07	\$10,202.54	\$185,364.28	
Pad Grading	20090	\$12,237.00	\$15,352.86	\$13,357.60	\$724.00	\$12,628.68	
Soils Testing	20010	\$3,850.00	\$3,020.00	\$4,129.00		\$4,129.00	
SWPP	20120	\$1,000.00	\$5,048.97	\$1,651.47		\$1,581.18	
Sewer	21000	\$93,848.00	\$114,966.73	\$105,431.31	\$8,110.45	\$111,743.86	
Sewer Lift Station	21060						
Basin Upgrade / Flow	23010			\$719.52		\$719.52	
Well and Booster Electronics	23020						
Water	23000	\$89,032.00	\$105,058.50	\$102,240.30	\$8,870.89	\$111,378.50	
Water Plant #3	23005	\$121,742.00	\$155,149.25	\$171,710.73	\$25,037.58	\$133,873.17	
EG Well Upgrade	23010	\$12,100.00					
Goodman Water Review Fees	17290	\$825.00	\$825.00				
Water Sys Support (Wastland) & telemetry	17300	\$1,000.00	\$1,000.00	\$159.93		\$159.93	
Water Inspection Fee (Wastland)	17310	\$1,320.00	\$1,320.00	\$113.60		\$2,793.22	\$4,310.38
Utilities Trenching	28000	\$14,004.00					
Electric Conduit	28000	\$33,818.00	\$50,500.00	\$1,070.01	\$824.78	\$57,053.83	
Paving	24050	\$140,841.00	\$329,073.67	\$264,753.53	\$20,871.20	\$332,970.33	
Drainage	27000	\$160,241.00	\$12,075.50	\$937.71	\$861.88	\$16,185.83	
Landscaping	27025	\$2,750.00	\$2,750.00	\$2,750.00	\$170.80	\$2,458.50	\$113.64
Revegetation / Hydroseed	20170	\$5,000.00	\$5,000.00	\$5,000.00		\$4,500.92	\$489.08
Detention Basin Paving	26004	\$1,650.00	\$1,650.00	\$578.38		\$5,004.92	\$484.47
Vegetation Work & engineering	26000						
Phone/Gas/Electric Deposit	25100	\$7,025.00	\$3,025.00	\$631.23	\$2,025.00	\$4,608.23	
Eagle Crest Boulevard	24070	\$00,000.00	\$99,901.01	\$404.19	\$8,181.31	\$99,222.88	
Construction Management	12070	\$12,150.00	\$12,150.00	\$150.00	\$360.17	\$11,689.83	
Development Costs		\$1,018,838.80	\$1,143,832.34	\$1,137.51	\$44,791.87	\$1,183,267.26	\$1,000.19
Sales Tax	24076	\$41,564.00	\$40,465.00	\$400.18	\$3,898.57	\$44,391.59	
5% Contingency	18998	\$50,842.00	\$50,841.05	\$41.56		\$17.20	\$926.36
10% Lift Station Contingency	18998						
10% Water Plant #3 Contingency	18998	\$8,258.00					
Total Land Development Costs		\$1,119,603.80	\$1,235,141.14	\$1,171.63	\$88,680.44	\$1,197,868.04	\$2,014.66
TOTAL COSTS		\$1,141,106.00	\$1,282,271.21	\$1,512.43	\$88,690.44	\$1,232,704.29	\$2,067.10
COST PER LOT		\$42,263.28	\$47,401.53	\$56.01		(47,100.02)	
Land Seller Reimbursement							
(Original budget less current budget) divided by 2							



BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. W-02500A-10-0382
GOODMAN WATER COMPANY, AN ARIZONA)
CORPORATION, FOR (i) A DETERMINATION)
OF THE FAIR VALUE OF ITS UTILITY PLANT)
AND PROPERTY AND (ii) AN INCREASE IN ITS)
WATER RATES AND CHARGES FOR UTILITY)
SERVICE BASED THEREON.)
_____)

DIRECT
TESTIMONY
OF
MARLIN SCOTT, JR.
UTILITIES ENGINEER
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

MARCH 21, 2011

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ENGINEERING REPORT	3

EXHIBIT

Engineering Report for Goodman Water Company	MSJ
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1 **INTRODUCTION**

2 **Q. Please state your name, place of employment and job title.**

3 A. My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation
4 Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix,
5 Arizona 85007. My job title is Utilities Engineer.

6
7 **Q. How long have you been employed by the Commission?**

8 A. I have been employed by the Commission since November 1987.

9
10 **Q. Please list your duties and responsibilities.**

11 A. As a Utilities Engineer, specializing in water and wastewater engineering, my
12 responsibilities include: the inspection, investigation, and evaluation of water and
13 wastewater systems; preparing reconstruction cost new and/or original cost studies,
14 reviewing cost of service studies and preparing investigative reports; providing technical
15 recommendations and suggesting corrective action for water and wastewater systems; and
16 providing written and oral testimony on rate applications and other cases before the
17 Commission.

18
19 **Q. How many cases have you analyzed for the Utilities Division?**

20 A. I have analyzed approximately 555 cases covering various responsibilities for the Utilities
21 Division.

22
23 **Q. Have you previously testified before this Commission?**

24 A. Yes, I have testified in 83 proceedings before this Commission.

1 **Q. What is your educational background?**

2 A. I graduated from Northern Arizona University in 1984 with a Bachelor of Science degree
3 in Civil Engineering Technology.

4
5 **Q. Briefly describe your pertinent work experience.**

6 A. Prior to my employment with the Commission, I was Assistant Engineer for the City of
7 Winslow, Arizona, for about two years. Prior to that, I was a Civil Engineering
8 Technician with the U.S. Public Health Service in Winslow for approximately six years.

9
10 **Q. Please state your professional membership, registrations, and licenses.**

11 A. I am a member of the National Association of Regulatory Utility Commissioners
12 (“NARUC”) Staff Subcommittee on Water.

13
14 **PURPOSE OF TESTIMONY**

15 **Q. What was your assignment in this proceeding?**

16 A. My assignment was to provide Staff’s engineering evaluation for Goodman Water
17 Company (“Company”) in this rate proceeding.

18
19 **Q. What is the purpose of your testimony in this proceeding?**

20 A. To present the findings of Staff’s engineering evaluation of the operation of the Company.
21 The findings are contained in the Engineering Report that I have prepared for this
22 proceeding and is included as Exhibit MSJ attached to this Direct Testimony.

1 **ENGINEERING REPORT**

2 **Q. Would you briefly describe what was involved in preparing your Engineering Report**
3 **for this rate proceeding?**

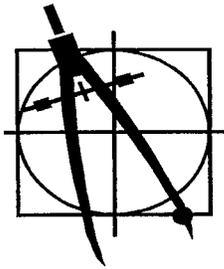
4 A. After reviewing the application for the Company, I physically inspected the water system
5 to evaluate its operation and to determine if any plant items were not used and useful. I
6 obtained information from the Company regarding plant facilities, water testing expense,
7 and I analyzed that information. Based on all the above, I prepared the attached
8 Engineering Report.

9
10 **Q. Do you provide a summary of the water company operation contained in your**
11 **Engineering Report?**

12 A. Yes, the summary containing Staff's engineering conclusions and recommendations are
13 located at the beginning of my Exhibit MSJ.

14
15 **Q. Does this conclude your Direct Testimony?**

16 A. Yes, it does.



**Engineering Report
For
Goodman Water Company
Docket No. W-02500A-10-0382 (Rates)**

March 18, 2011

SUMMARY

CONCLUSIONS

- A. Goodman Water Company (“Company”) had a water loss of 9.5% during the test year 2009 which is within the acceptable limit of 10% recommended by Staff.
- B. According to an Arizona Department of Environmental Quality (“ADEQ”) Compliance Status Report, dated June 30, 2010, ADEQ has determined that the Company’s system, Public Water System No. 11-130, is currently delivering water that meets water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.
- C. The Company is located in the Arizona Department of Water Resources’ (“ADWR”) Tucson Active Management Area and ADWR has reported that the Company is in compliance with ADWR’s requirements governing water providers and/or community water systems.
- D. According to the Utilities Division Compliance database, the Company has delinquent Arizona Corporation Commission compliance items. However, the Company has filed a Motion to Withdraw its Application related to this delinquent case.
- E. The Company has an approved curtailment tariff with an effective date of February 18, 2003.
- F. The Company has an approved backflow prevention tariff with an effective date of February 18, 2003.

RECOMMENDATIONS

- 1. Staff recommends the removal of half of the 530,000 gallon storage tank at a cost of \$185,049 from the plant-in-service because this amount of the storage tank is excess capacity.
- 2. Staff recommends the removal of certain identified water mains at a total cost of \$105,564 from the plant-in-service because these water mains are not used and useful.

EXHIBIT MSJ

3. Staff recommends an average annual water testing expense of \$2,783 be adopted for this proceeding.
4. Staff recommends that the Company continue to use the depreciation rates by individual National Association of Regulatory Utility Commissioners category as presented in Table I-1.
5. Staff recommends the acceptance of the Company's proposed service line and meter installation charges as presented in Table J-1.

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A. INTRODUCTION

On September 17, 2010, Goodman Water Company (“Company”) filed a rate application. This Engineering Report constitutes Staff’s engineering evaluation relative to the Company’s rate application.

The Company serves a community located approximately two miles south of Oracle Junction and approximately 22 miles north of downtown Tucson. Figure A-1 shows the location of the Company within Pinal County and Figure A-2 shows the approximate 1.3 square-miles of certificated area.

B. DESCRIPTION OF WATER SYSTEM

The water system was field inspected on December 16, 2010, by Marlin Scott, Jr., Staff Utilities Engineer, in the accompaniment of Bridget Humphrey, Staff Attorney; and Mark Taylor, Lisa Sullivan, Lex Sears, and Jim Shiner, representing the Company.

The operation of the water system consisted of two wells, two storage tanks, three booster systems and a distribution system serving 621 customers at the end of test year ending December 2009. A system schematic is shown in Figure B-1 with detailed plant facility descriptions as follows:

Table 1. Well Data

Well Data	Well #1	Well #2
ADWR ID No.	55-610541	55-595228
Casing Size	12-inch	16-inch
Casing Depth	700 feet	618 feet
Year Drilled	1982	2004
Pump	75-Hp Vertical Turbine	100-Hp Vertical Turbine
Flow Rate	500 GPM	800 GPM
Meter Size	8-inch	8-inch
Treatment	Tablet Chlorination	Liquid Chlorination
Press Tank (surge)	5,000 gallon	5,000 gallon

Table 2. Storage Tanks

Capacity (Gallons)	Quantity (Each)	Location	Year Constructed
400,000	1	Well Site #1	2001
530,000	1	Booster Site #3	2008

Table 3. Booster Systems

Location	Plant Facilities	Storage Tanks (From Table 2)
Well Site #1	20, 40, 50 and 75-Hp booster pumps, 5,000 gal. pressure tank (surge), with 10-inch meter.	400,000 gal. storage tank
Booster Site #4	5, 10, 15 and 40-Hp booster pumps, two 5,000 gal. pressure tanks (surge), with 8-inch meter.	
Booster Site #3	7-1/2, 15 and 30-Hp booster pumps, 5,000 gal. pressure tank (surge), with 6-inch meter.	530,000 gal. storage tank

Table 4. Water Mains

Diameter	Material	Length
3-inch	PVC	950 ft.
6-inch	PVC	4,012 ft.
8-inch	PVC	19,108 ft.
12-inch	PVC	17,627 ft.
12-inch	DIP	208 ft.
	Total:	41,905 ft.

Table 5. Customer Meters

Size	Quantity
5/8 x 3/4-inch	543
3/4-inch	92
1- inch	6
1-1/2-inch	1
2-inch	5
3-inch	1
Total:	648

Table 6. Fire Hydrants

Size	Quantity
Standard	67

Table 7. Structures & Treatment Equipment

Structures & Treatment Equipment
Well #1: Tablet chlorination unit and 150 feet by 150 feet block wall fencing.
Well #2: Liquid chlorination unit and 100 feet by 100 feet block wall fencing.
Booster Site #4: 75 feet by 100 feet block wall fencing.
Booster Site #3: 100 feet by 160 feet block wall fencing & 12 feet by 15 feet storage building.
Telemetry (SCADA) system and security/motion detectors at all sites.

C. WATER USE

Water Sold

Based on the information provided by the Company, water use for the year 2009 is presented in Figure C-1. Customer consumption experienced a high monthly average water use of 230 gallons per day (“GPD”) per connection in October and a low monthly average water use of 130 GPD per connection in December for an average annual use of 196 GPD per connection.

Non-Account Water

Non-account water should be 10% or less. For the 2009 test year, the Company reported 48,663,000 gallons pumped and 44,043,000 gallons sold, resulting in a water loss of 9.5%. Although this 9.5% is within the acceptable limits, Staff noticed that the December 2009 data showed more gallons sold than gallons pumped.

As a follow-up to the 2009 test year water data, Staff requested the Company provide data for the 2010 months from January to November to further evaluate the water loss. Based on this 2010 data, the Company reported 46,339,000 gallons pumped and 42,517,000 gallons sold, resulting in a water loss of 8.3 percent. In summary, the 9.5 percent and 8.3 percent are within the acceptable limits.

System Analysis

Using the Company's 2009 test year data, the Company reported its highest peak use month as October with 4,350,000 gallons sold to 610 customers. Based on this data, Staff estimates the average daily demand to be 230 GPD per connection for evaluating storage capacity sufficiency. For well capacity evaluation, Staff used 0.20 GPM per connection ($=230 \times 1.25 \text{ factor} / 1440$) for the peak day demand. Using these factors, Staff determined that:

1. The well capacity totaling 1,300 GPM ($=\text{Well \#1 at } 500 + \text{Well \#2 at } 800$) could adequately serve approximately 6,500 connections ($=1,300 / 0.20$). The total well capacity is not excessive because one well is a back-up to the other in case one well is placed out of service. In addition, the total well capacity supplements the fire flow requirement.
2. The storage capacity totaling 930,000 gallons ($=400,000 + 530,000$), minus the fire flow requirement (2,000 GPM at 2 hours = 240,000 GPD), could adequately serve up to approximately 3,000 connections ($((=930,000 - 240,000) / 230)$).
3. Looking forward, Figure D-1 shows a growth projection to approximately 875 total connections by December 2014.

Based on this analysis, the test year well capacity of 1,300 GPM is adequate. However, the storage capacity of 9,300,000 gallons has excess storage capacity for the test year customer base and even for customer growth within a 5-year period.

D. GROWTH

Figure D-1 depicts the customer growth using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the test year 2009, the Company had 621 customers and it is projected that the Company could have approximately 875 customers within a 5-year period ending December 2014.

E. PLANT-IN-SERVICE ADJUSTMENTS

Excess Storage Tank Capacity

As shown above in the System Analysis section, the total storage tank capacity of 930,000 gallons has excess capacity. To further evaluate how much of the storage tank capacity is excessive, Staff considered the following:

1. Within a 5-year period, Staff estimated the required storage capacity to be 441,250 GPD. This amount is calculated by the fire flow requirement (240,000 GPD) plus the demand in five years at 201,250 GPD (= 230 GPD/connection x 875 connections), totaling to 441,250 GPD.
2. The entire 400,000 gallon storage tank is needed because both wells pump into this tank and this tank serves as the chlorination contact time chamber. In addition, this tank serves as the main storage for fire flow protection for the majority of the water system.
3. Staff estimated the 5-year projected storage capacity at 441,250 GPD which is more than the 400,000 gallon storage tank by 41,250 gallons.
4. To determine how much of the 530,000 gallon storage tank is needed, Staff considered the fire flow of 180,000 gallons (=1,500 GPM at 2 hours) for the K-Zone customers plus the 41,250 gallons, totaling to 221,250 gallons.
5. 221,250 gallons is 42% of the 530,000 gallon tank, which Staff rounded to 50%. Staff considers half of the 530,000 gallons is needed at this time. Therefore, the cost of the 530,000 gallon storage tank at \$370,098 is reduced by half, being \$185,049.

In summary, Staff considers half of the 530,000 gallon storage tank to be excess capacity and recommends disallowance of half the tank (265,000 gallons) at a cost of \$185,049 for this rate proceeding.

Plant Not Used and Useful

Staff noted during its field inspection there were certain portions of the water system that had plant facilities constructed, but no homes or water services. Through the Company data responses regarding these certain areas, Staff obtained:

- A. Water system as-built maps.
- B. Cost of water mains facilities for;
 1. Water Plant Site #1 to Proposed Well Site #3;
 - a. 974 feet of 12-inch transmission main with appurtenances from Water Plant Site #1 to Eagle Mountain Drive at \$50,586. Since Well #3 is not

yet constructed, Staff considered this transmission main not used and useful because it is not in service.

- b. 524 feet of 12-inch transmission main with appurtenances from Eagle Mountain Drive to Proposed Well Site #3. The cost at \$28,470 has not yet been recorded to the plant-in-service.
 - c. 1,571 feet of 12-inch transmission main with appurtenances from Eagle Mountain Drive to Saddlebrooke Boulevard. The cost at \$94,197 has not yet been recorded to the plant-in-service.
2. Edwin Road to end of line (southwest corner);
 - a. The Company provided a cost of \$29,966 for 679 feet of 12-inch main with appurtenances. After Staff's review, Staff considered 369 feet of this main to be used and useful because it provided fire flow protection service. For the remaining portion of the main, Staff considered this 310 foot section not used and useful because it did not provide service to the proposed commercial lots. Therefore, Staff adjusted the \$29,966 amount to reduce to \$14,600 for 310 feet of 12-inch main with appurtenances.
3. Phase 5 – Main on Running Roses Lane;
 - a. The Company provided a total cost of \$88,803 for 1,650 feet of 8-inch main with appurtenances (divided in two sections; 886 feet at \$48,425 and 764 feet at \$40,378). After Staff's review, Staff considered the 886 foot section to be used and useful because it looped the system for this area and the 764 foot section not used and useful because it did not serve any customers. Therefore, Staff reduced the amount to \$40,378 for the 764 foot section of the 8-inch main with appurtenances for this area.

As a result of the review and evaluation of the above data, a summary of the plant facilities that are considered excess capacity and/or not used and useful are as follows:

Table E-1. Plant-in-Service Adjustments

Acct. No.	Plant Facilities	Year Installed	Original Cost
330	Distribution Reservoirs 530,000 gallon storage tank (half is 265,000 gallons) (Remove half of tank and cost, $\$370,098 / 2 = \$185,049$)	2008	\$185,049
331	Transmission & Distribution Mains 1. From Water Plant #1 to Proposed Well Site #3: a. 12-inch main w/ appurtenances at 974 feet. b. 12-inch main w/ appurtenances at 524 feet. ($\$28,470$ not yet recorded) c. 12-inch main w/ appurtenances at 1,571 feet. ($\$94,197$ not yet recorded) 2. From Edwin Road to end of line (southwest corner): 12-inch main w/ appurtenances at 310 feet. 3. Phase 5 - Main on Running Roses Lane: 8-inch main w/ appurtenances at 764 feet	2008 2002 2008	\$50,586 \$14,600 \$40,378
		Total:	\$290,613

[Note: On March 17, 2011, Staff received a response to its Tenth Set of Data Requests. Any further plant-in-service adjustment and recommendation related to this data request will be provided in Staff's surrebuttal testimony.]

Staff recommends the removal of above identified plant facilities totaling to \$290,613, from the plant-in-service because these plant items have excess capacity and/or are not used and useful in this rate proceeding.

F. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

In an ADEQ compliance status report, dated June 30, 2010, ADEQ reported that the Company's system, PWS #11-130, has no major deficiencies and is currently delivering water that meets water quality standards required by 40 CFR 141/Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expense

The Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP"). The Company reported its water testing expense at \$1,215 during the test year. Staff has reviewed this expense and has recalculated the annual testing expense by including the omitted MAP invoice and normalizing the monitoring samples and costs as shown in Table F-1 below:

Table F-1. Water Testing Expense

Monitoring	Cost per test	No. of test	Annual Cost
Total coliform – 2 samples per month	\$20	24	\$480
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$1,938
Lead & Copper – 10 samples per 3 years	\$33	10	\$110
D/DBP – TTHM - annually	\$100	1	\$100
– HAA5 - annually	\$155	1	\$155
Total			\$2,783

Note: ADEQ's MAP invoice for the 2011 Calendar Year was \$1,938.49.

Staff recommends an annual water testing expense of \$2,783 be used for the purpose of this application.

G. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Company is located in the ADWR's Tucson Active Management Area. According to ADWR's Water Provider Compliance Status Report dated December 7, 2010, this Company is in compliance with ADWR's requirements governing water providers and/or community water systems.

H. ACC COMPLIANCE

According to the Utilities Division Compliance Section, the Company has delinquent ACC compliance issues related to a CC&N extension case (05-0643) and its Decision No. 68444. However, due to the downturn in the economy, the developer cannot provide the required Main Extension Agreement and Certificate of Assured Water Supply to the Company. As a result, the Company has filed a Motion to Withdraw its Application for its CC&N extension case. This withdrawal request is awaiting Commission consideration.

I. DEPRECIATION RATES

In the prior rate case, the Company was authorized to use Staff's typical and customary depreciation rates. These depreciation rates are presented in Table I-1 and it is recommended that the Company continue to use these depreciation rates by individual National Association of Regulatory Utility Commissioners category.

J. SERVICE LINE AND METER INSTALLATION CHARGES

The Company has requested changes in its service line and meter installation charges. These charges are refundable advances and the Company's requested charges are within Staff's customary range of charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, Staff recommends approval of the Company's charges as shown in Table J-1, with separate installation charges for the service line and meter.

K. CURTAILMENT PLAN TARIFF

The Company has an approved curtailment tariff that became effective on February 18, 2003.

L. BACKFLOW PREVENTION TARIFF

The Company has an approved backflow prevention tariff that became effective on February 18, 2003.

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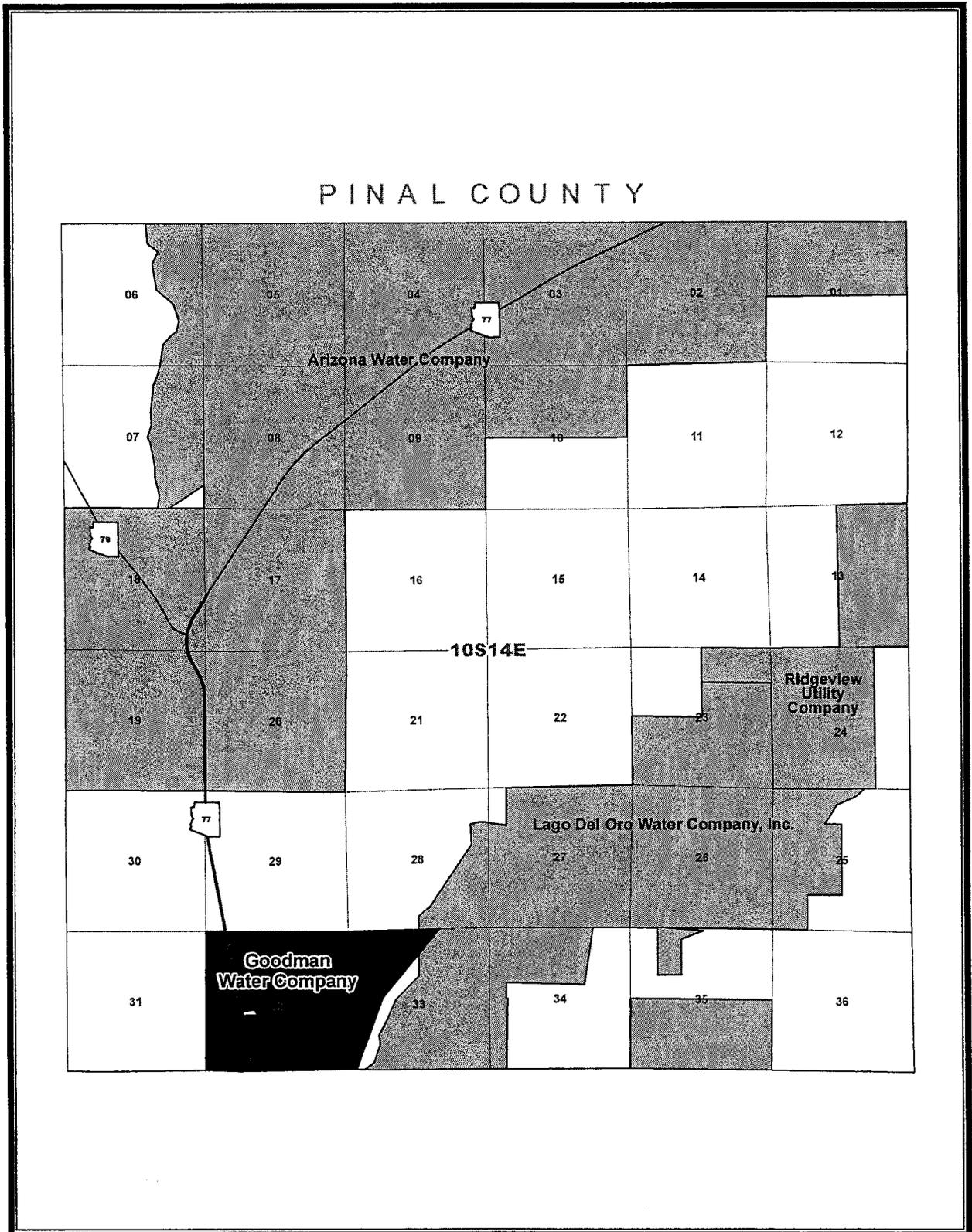


Figure A-2. Certificated Area

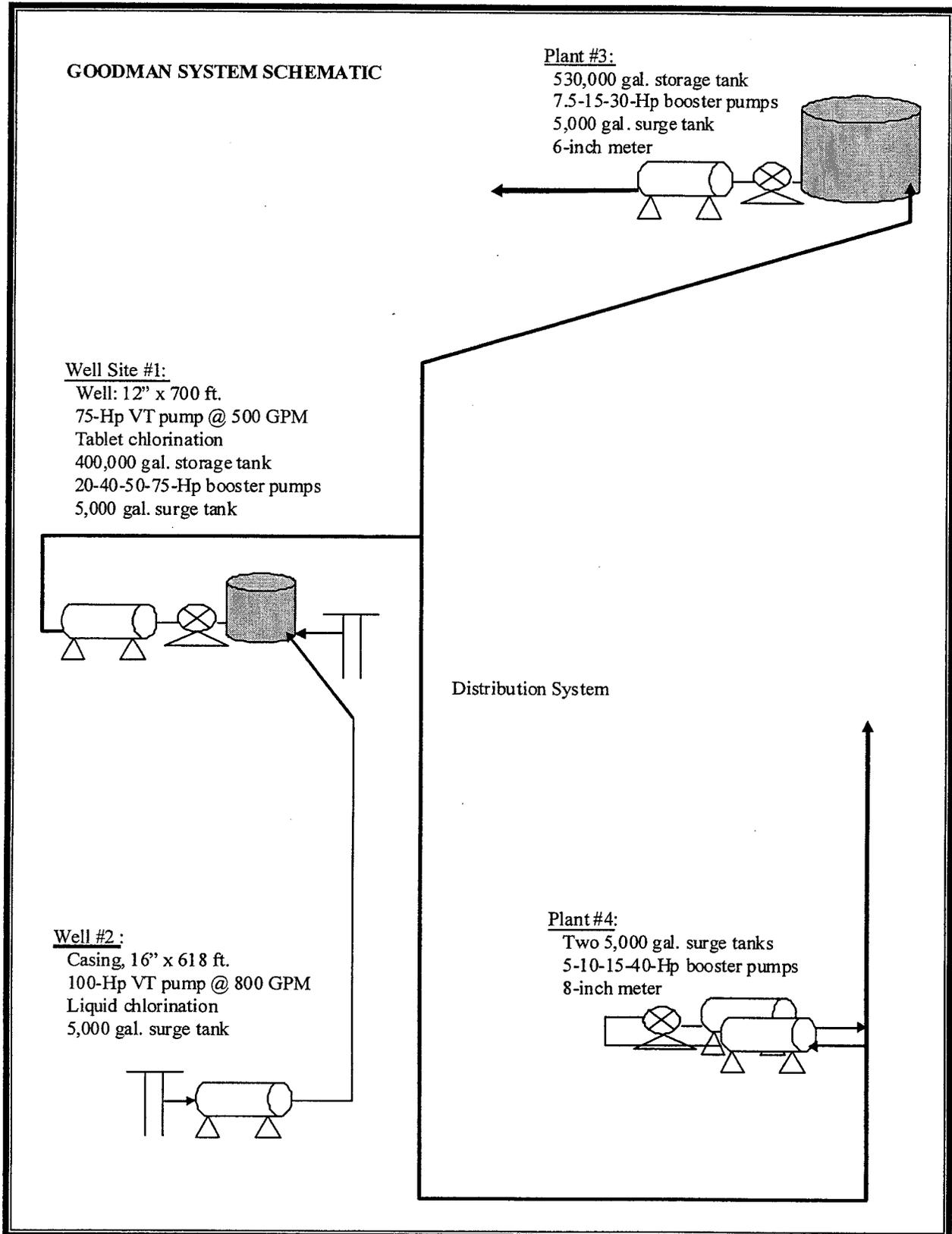


Figure B-1. System Schematic

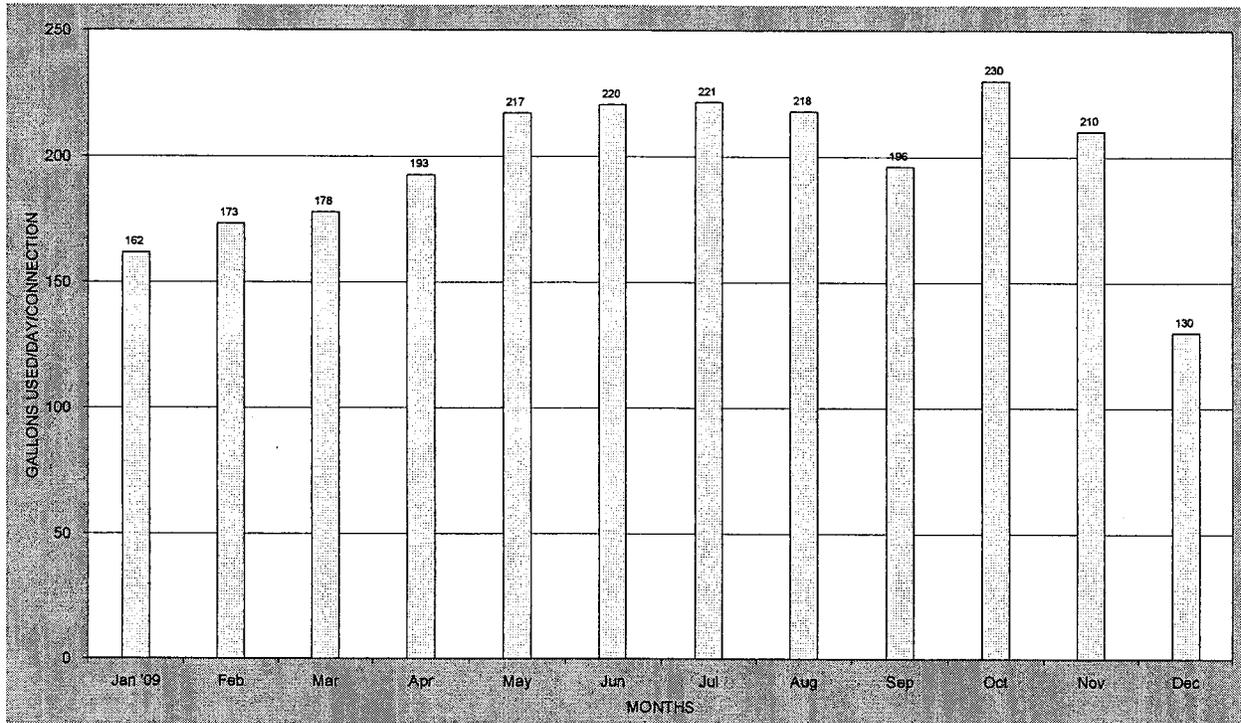


Figure C-1. Water Use

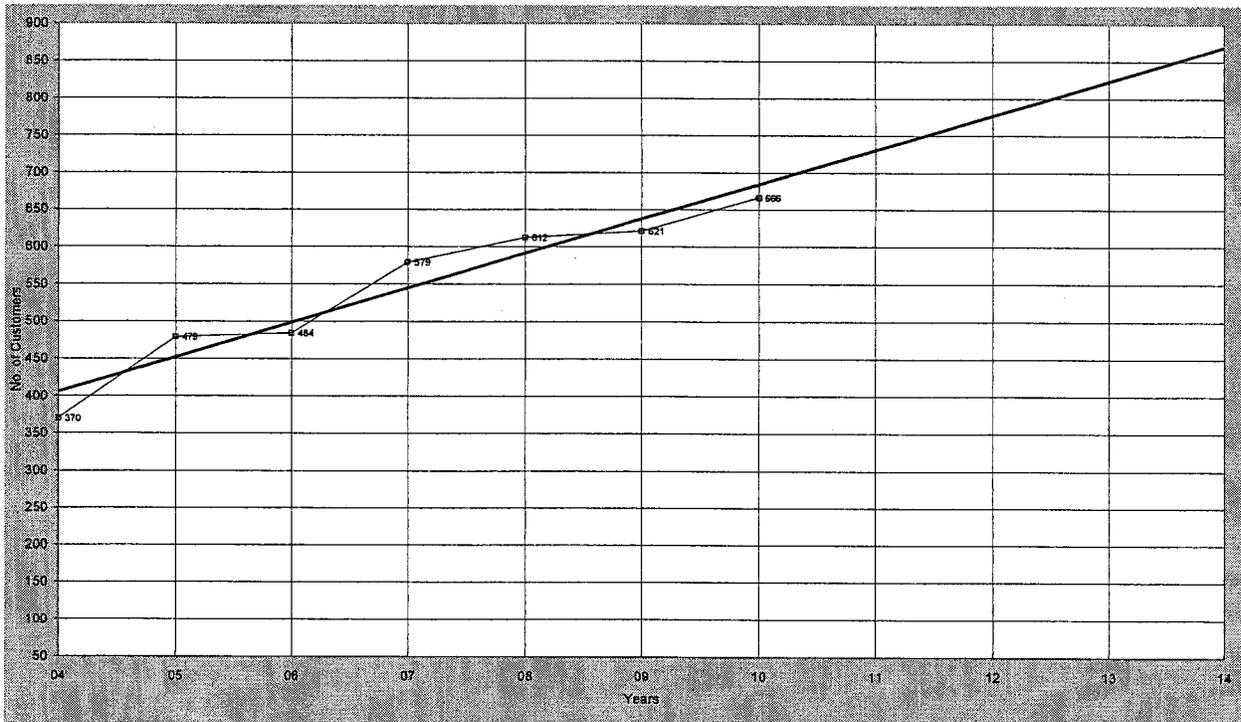


Figure D-1. Growth

Table I-1. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Equipment	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	10	10.00

Table J-1. Service Line and Meter Installation Charges

Meter Size	Current Total Charges	Proposed Service Line Charges	Proposed Meter Charges	Proposed Total Charges
5/8 x 3/4"	\$225	\$385	\$135	\$520
3/4"	\$270	\$415	\$205	\$620
1"	\$300	\$465	\$265	\$730
1-1/2"	\$425	\$520	\$475	\$995
2" Turbine	\$550	\$800	\$995	\$1,795
2" Compound	NT	\$800	\$1,840	\$2,640
3" Turbine	\$750	\$1,015	\$1,620	\$2,635
3" Compound	NT	\$1,135	\$2,495	\$3,630
4" Turbine	\$1,375	\$1,430	\$2,570	\$4,000
4" Compound	NT	\$1,610	\$3,545	\$5,155
6" Turbine	\$2,800	\$2,150	\$4,925	\$7,075
6" Compound	\$NT	\$2,270	\$6,820	\$9,090



BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF)
GOODMAN WATER COMPANY, AN ARIZONA)
CORPORATION, FOR (i) A DETERMINATION)
OF THE FAIR VALUE OF ITS UTILITY PLANT)
AND PROPERTY AND (ii) AN INCREASE IN ITS)
WATER RATES AND CHARGES FOR UTILITY)
SERVICE BASED THEREON.)

DOCKET NO. W-02500A-10-0382

SURREBUTTAL

TESTIMONY

OF

MARLIN SCOTT, JR.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JUNE 13, 2011

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**SURREBUTTAL SUMMARY
GOODMAN WATER COMPANY
DOCKET NO. W-02500-10-0382**

CONCLUSION/RECOMMENDATIONS

- A. Staff believes its growth projection should be used because the data used is the actual data obtained from Goodman Water Company ("Company") and this data shows a growth pattern appropriate for this economic climate.
- B. Staff revised its plant-in-service adjustment totaling to \$128,600 for plant items considered not used and useful in this proceeding.
- C. Staff accepts of the Company's position that the Water Plant No. 3's storage tank is actually a 600,000 gallon tank with a useable capacity of 487,000 gallons. In addition, the Company states that the 190,000 gallon "upsizing" of the Water Plant No. 3 storage tank at a cost of \$72,350 was not part of this rate case. Based on these factors, Staff is willing to withdraw any adjustment and considers the 340,000 gallon storage tank, which is really a 410,000 gallon tank, used and useful for purposes of this rate proceeding.
- D. Staff recommends that the Company file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least five Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. These BMP templates are available on the Commission's website. A maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

1 **INTRODUCTION**

2 **Q. Please state your name, place of employment and job title.**

3 A. My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation
4 Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix,
5 Arizona 85007. My job title is Utilities Engineer.

6
7 **Q. Are you the same Marlin Scott, Jr. who submitted Direct Testimony on behalf of the**
8 **Utilities Division?**

9 A. Yes.

10
11 **Q. What was the purpose of that testimony?**

12 A. My Direct Testimony provided the Utilities Division Staff's ("Staff") engineering
13 evaluation of Goodman Water Company ("Company") for this proceeding.

14
15 **Q. What is the purpose of your Surrebuttal Testimony?**

16 A. To provide Staff's response to the Company's Rebuttal Testimony on three issues; 1)
17 growth projection, 2) plant not used and useful, and 3) excess storage tank capacity.
18 Staff's response to the excess storage tank capacity issue will also be in response to the
19 intervener's rebuttal testimony. Staff will also provide a recommendation for the
20 Company to submit Best Management Practice Tariffs.

21
22 **GROWTH PROJECTION**

23 **Q. Have you reviewed the rebuttal testimony of Mark F. Taylor regarding growth**
24 **projection?**

25 A. Yes.

1 **Q. What was Mr. Taylor's conclusion regarding the growth projection?**

2 A. Mr. Taylor did not agree with Staff's estimated growth projection of 875 customers by
3 2014 using the 2009 test year customer base of 621 and the 5-year customer growth
4 projection based on historical growth after the test year. In fact, Mr. Taylor suggested that
5 this rate case proceeding not use the 2009 test year data but use data ending in 2007 or
6 2008 which would project customer growth of 1,113 and 1,112 by 2012 and 2013,
7 respectively.

8

9 **Q. Does Staff agree with Mr. Taylor's conclusion?**

10 A. No.

11

12 **Q. Why not?**

13 A. First, this Commission uses test year data in determining rates. The Company selected the
14 test year ending December 31, 2009 and therefore, data from the test year should be used.
15 Second, if Mr. Taylor's suggested growth projection was used in this rate proceeding, then
16 his projected customer base of 820 and 725 as shown for 2009 in both graphs of his
17 Rebuttal's Appendix E is much higher than the actual 2009 test year customer base of 621.

18

19 **Q. Does Staff still recommend the use of its growth projection?**

20 A. Yes. Staff believes its growth projection should be used because the data used is the
21 actual data obtained from the Company and this data shows a growth pattern appropriate
22 for this economic climate.

1 **PLANT NOT USED AND USEFUL**

2 **Q. Have you reviewed the rebuttal testimony of Mr. Taylor regarding plant items not**
3 **used and useful?**

4 A. Yes.

5
6 **Q. What was Mr. Taylor's conclusion regarding these plant items?**

7 A. Mr. Taylor did not disagree or agree with Staff's plant adjustments that were considered
8 not used and useful. Mr. Taylor only provided reasons why certain water mains were
9 installed, but did not dispute Staff's position that these certain water mains were not in
10 service nor providing service to customers.

11
12 **Q. What is Staff's response?**

13 A. As a summary, Staff's list of plant items considered not used and useful in its Direct
14 Testimony is as follows:

15

Acct. No.	Plant Facilities	Year Installed	Original Cost
331	Transmission & Distribution Mains		
	1. From Water Plant #1 to Proposed Well Site #3: a. 12-inch main w/ appurtenances at 974 feet.	2008	\$50,586
	b. 12-inch main w/ appurtenances at 524 feet. (\$28,470 not yet recorded)		N/A
c. 12-inch main w/ appurtenances at 1,571 feet. (\$94,197 not yet recorded)		N/A	
	2. From Edwin Road to end of line (southwest corner): 12-inch main w/ appurtenances at 310 feet.	2002	\$14,600
	3. Phase 5 - Main on Running Roses Lane: 8-inch main w/ appurtenances at 764 feet	2008	\$40,378
	Direct Testimony Total:		\$105,564

1 In addition to the above three identified water mains, Staff also noted in its Direct
2 Testimony that Staff was awaiting a response to a data request and that any further plant-
3 in-service adjustment and recommendation related to its Tenth Set of Data Requests
4 would be provided in its Surrebuttal. Below is Staff's plant adjustment of \$23,036 related
5 to the Company's response to Staff's Tenth Data Request.
6

Acct. No.	Plant Facilities	Year Installed	Original Cost
331	Transmission & Distribution Mains 4. Phase 4 - Main on Sparkle Spur Lane: 8-inch main w/ appurtenances at 308 feet and 6-inch main w/ appurtenances at 140 feet	2007	\$23,036
	Surrebuttal Testimony Total:		\$23,036
	Direct Testimony Total:		\$105,564
	TOTAL:		\$128,600

7
8 As a final result, Staff's total adjustment for plant items not used and useful is \$128,600 as
9 shown above. It is still Staff's position that the above identified water mains are
10 considered not used and useful because these mains do not provide service to customers.
11

12 EXCESS STORAGE TANK CAPACITY

13 **Q. First, could you provide a definition of excess capacity and brief description on how**
14 **Staff determines if any plant facility has excess capacity?**

15 **A.** Yes. Staff defines excess capacity to mean constructed plant facilities that exceed the
16 system requirements within a reasonable planning period. Staff typically uses peak
17 demand factors as the requirement and 5 years as a reasonable planning period. Any
18 operating plant facility needed beyond the 5-year planning period may be considered
19 excess capacity. In other words, excess capacity exists when the installed plant capacity

1 exceeds what is needed to accommodate reasonable growth. The 5-year growth projection
2 enables utilities to provide new service connections for a reasonable period. This
3 approach is also consistent with how Staff handles this issue in other applications it
4 analyzes.

5
6 **Q. Have you reviewed the rebuttal testimony of Mr. Taylor regarding excess storage**
7 **tank capacity?**

8 A. Yes.

9
10 **Q. What was Mr. Taylor's conclusion regarding the excess storage tank capacity?**

11 A. Mr. Taylor did not agree with Staff's position that the Company's 530,000 gallon storage
12 tank had excess capacity. Mr. Taylor based his conclusion by using; 1) design
13 requirements for demand assumption of 2.8 persons per household at 100 gallons person
14 per day, or average daily demand of 280 gallons per day per service connection, 2)
15 identifying "dead storage" versus "usable" volume of storage capacity, and 3) using his
16 growth projection.

17
18 **Q. Does Staff agree with Mr. Taylor's conclusion?**

19 A. No.

20
21 **Q. Why not?**

22 A. First, Staff would like to point out that the 530,000 gallon storage tank is actually a
23 600,000 gallon storage tank. The data that determined the size of this tank to be 600,000
24 gallons came from Mr. Taylor's Rebuttal – Appendix B where the Water Plant No. 3
25 schematic showed the tank dimension of 72 feet in diameter by 20 feet in height.

26

1 For the test year ending December 2009, the Company submitted a Water Use Data Sheet
2 (“WUDS”) to show the demand placed on its water system. The WUDS shows the actual
3 peak month demand placed on the water system by the test year customer base. Staff
4 always uses the actual use data when it is available to determine an appropriate capacity
5 and not the “design” demand consumption factors used by Mr. Taylor.

6
7 Since the storage tank is actually a 600,000 gallon tank, Staff re-evaluated its storage
8 capacity calculation. Staff also took into consideration the Company’s 487,000 gallons of
9 useable capacity in its re-evaluation. Staff also accepted the Company’s position that the
10 190,000 gallon “upsizing” of the Water Plant No. 3 storage tank at a cost of \$72,350 was
11 not part of this rate case. Based on the above factors, Staff is willing to withdraw any
12 adjustment and considers the 340,000 gallon storage tank, which is really a 410,000 gallon
13 tank, used and useful for purposes of this rate proceeding. Staff revised calculations are
14 shown in EXHIBIT MSJ-1 to this testimony.

15
16 **Q. Have you reviewed the rebuttal testimony of the intervener, Lawrence Wawrzyniak**
17 **regarding excess storage tank capacity?**

18 A. Yes.

19
20 **Q. What was Mr. Wawrzyniak’s concern regarding the excess storage tank capacity?**

21 A. Mr. Wawrzyniak did not agree with Staff’s use of a commercial fire flow requirement and
22 how this effected the storage capacity requirement.

1 **Q. What is Staff's response?**

2 A. It is Staff's understanding that there are different fire flow requirements for this water
3 system; 2,000 GPM at 2 hours for commercial and 1,000 to 1,500 GPM at 2 hours for
4 residential. In its initial evaluation process, Staff took the highest fire flow requirement,
5 which is the commercial requirement, as the governing fire flow to calculate the required
6 storage capacity. Although there are commercial lots available but no commercial
7 customers at this time, Staff used the commercial fire flow requirement because the
8 Company's service area identified the commercial zoning area, sized plant facilities to
9 accommodate the commercial zoning area, and water service is readily available upon
10 request. Therefore, Staff believes it is reasonable to use the commercial fire flow
11 requirement.

12
13 After Staff conducted its initial evaluation of the required storage capacity, Staff further
14 evaluated the storage tank at Water Plant No. 3 and its operation. The operation of this
15 storage tank indicated that this tank was needed to provide the fire flow requirement to K-
16 Zone residential customers located in the northern-most upper zone area of the water
17 system. Therefore, Staff included the fire flow requirement of 1,500 GPM at 2 hours in
18 the evaluation of Water Plant No. 3's storage tank. As part of this Surrebuttal, Staff re-
19 evaluated the storage tank capacity calculation as shown in EXHIBIT MSJ-1 to this
20 testimony.

21
22 **BEST MANAGEMENT PRACTICES TARIFFS**

23 **Q. Could you provide a brief background of the Best Management Practices.**

24 A. Yes. In 2008, the Arizona Department of Water Resources ("ADWR") added a new
25 regulatory program for the ADWR Third Management Plan for Active Management Areas
26 ("AMAs"). The new program, called Modified Non-Per Capita Conservation Program

1 (“Modified NPCCP”), addresses large municipal water providers (cities, towns and private
2 water companies serving more than 250 acre-feet per year) and was developed in
3 conjunction with stakeholders from all AMAs. Participation in the program is required for
4 all large municipal water providers in AMA’s that do not have a Designation of Assured
5 Water Supply and that are not regulated as a large untreated water provider or an
6 institutional provider.

7
8 The Modified NPCCP is a performance-based program that requires participating
9 providers to implement water conservation measures that result in water use efficiency in
10 their service areas. A water provider regulated under the program must implement a
11 required Public Education Program and choose one or more additional Best Management
12 Practices (“BMPs”) based on its size, as defined by its total number of water service
13 connections. The provider must select the additional BMPs from the list included in the
14 Modified NPCCP Program. The BMPs are a mix of technical, policy, and information
15 conservation efforts.

16
17 Although the implementation of the Modified NPCCP is required of large municipal water
18 providers within an AMA, the Commission has previously adopted the BMPs for
19 implementation by Commission regulated water companies.

20
21 **Q. In its Direct Testimony, did Staff provide a recommendation regarding BMPs?**

22 **A.** No. However, Staff believes that the filing of this Surrebuttal provides the opportunity for
23 Staff to present a discussion and recommendation for the BMPs for Commission
24 consideration.

1 **Q. What is Staff's recommendation regarding the BMPs?**

2 A. Staff recommends that the Company file with Docket Control, as a compliance item in this
3 docket and within 90 days of the effective date of a decision in this proceeding, at least
4 five BMPs in the form of tariffs that substantially conform to the templates created by
5 Staff for Commission's review and consideration. These BMP templates are available on
6 the Commission's website. A maximum of two BMPs may come from the "Public
7 Awareness/Public Relations" or "Education and Training" categories. The Company may
8 request cost recovery of the actual costs associated with the BMPs implemented in its next
9 general rate application.

10

11 **Q. Does this conclude your Surrebuttal Testimony?**

12 A. Yes.

RE-EVALUATION OF EXCESS STORAGE TANK CAPACITY

The storage tank capacity totaling 1,000,000 gallons (= 400,000 + 600,000), minus the fire flow requirement (2,000 GPM at 2 hours = 240,000 GPD), could adequately serve up to approximately 3,300 connections (= (1,000,000 - 240,000) / 230). For this proceeding, the 600,000 gallon tank is divided into 410,000 gallon and 190,000 gallon (upsized) capacities.

The usable storage tank capacity totaling 803,000 gallons (= 316,000 + 487,000), minus the fire flow requirement (2,000 GPM at 2 hours = 240,000 GPD), could adequately serve up to approximately 2,450 connections (= (803,000 - 240,000) / 230).

As shown above, the total storage tank capacity of 1,000,000 gallons, **with 803,000 gallons of usable capacity**, could have excess capacity. To further evaluate how much of the **usable** storage tank capacity is excessive, Staff considered the following:

1. Within a 5-year period, Staff estimated the required storage capacity to be 441,250 GPD. This amount is calculated by the fire flow requirement (240,000 GPD) plus the demand in five years at 201,250 GPD (= 230 GPD/connection x 875 connections), totaling to 441,250 GPD.
2. The entire 400,000 gallon storage tank, **with 316,000 gallons of useable capacity**, is needed because both wells pump into this tank and this tank serves as the chlorination contact time chamber. In addition, this tank serves as the main storage for fire flow protection for the majority of the water system.
3. Staff estimated the 5-year projected storage capacity at 441,250 GPD which is more than the **316,000 gallons of usable capacity by 125,250 gallons.**
4. To determine how much of the 600,000 gallon storage tank, **with 487,000 gallons of useable capacity**, is needed, Staff considered the fire flow of 180,000 gallons (=1,500 GPM at 2 hours) for the K-Zone customers plus the 125,250 gallons **totaling to 305,250 gallons of required capacity.**
5. **The 305,250 gallons of required capacity is 63% of the 487,000 gallons of useable capacity.** However, the Company has claimed that the upsized 190,000 gallon of tank capacity is not part of the rate case, which would reduce the useable tank capacity to 297,000 gallons (= 487,000 - 190,000). Since the 305,250 gallons of required capacity is more than the 297,000 gallons of useable capacity by 8,250 gallons, Staff concludes that the Water Plant No. 3's storage tank capacity of 410,000 gallons is not excessive for this rate proceeding.



BEFORE THE ARIZONA CORPORATION COMMISSION

DOCKETED

SEP 03 1993

MARCIA WEEKS
CHAIRMAN
RENZ D. JENNINGS
COMMISSIONER
DALE H. MORGAN
COMMISSIONER

DOCKETED BY JOL

IN THE MATTER OF THE APPLICATION) DOCKET NO. U-2259-92-318
OF NORTH MOHAVE VALLEY CORPORATION)
FOR A RATE INCREASE.) DECISION NO. 58407
)
) OPINION AND ORDER

DATES OF HEARING: May 4, and May 5, 1993
PLACE OF HEARING: Phoenix, Arizona
PRESIDING OFFICER: Marc E. Stern
APPEARANCES BY: LEEK & SUTHERLAND, P.C., by Mr. Terrence S. Leek, on behalf of North Mohave Valley Corporation;
Ms. Elaine A. Williams, Staff Attorney, on behalf of the Residential Utility Consumer Office; and
Mr. Peter Breen, Staff Attorney, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

BY THE COMMISSION:

On November 10, 1992, North Mohave Valley Corporation ("NMVC" or "Applicant") filed with the Arizona Corporation Commission ("Commission") an application requesting that the Commission determine the "fair value" of its property for rate making purposes, to fix a just and reasonable rate of return, and thereafter to approve rate schedules designed to produce said return. Pursuant to a Procedural Order issued by the Commission on December 28, 1992, a hearing was scheduled to commence on May 4, 1993 on NMVC's application.

On January 7, 1993, the Residential Utility Consumer Office

1 ("RUCO") filed an application to intervene in the proceeding.

2 On January 25, 1993, the Commission authorized RUCO's
3 intervention in the proceeding.

4 On April 1, 1993, NMVC mailed notice of its application to each
5 of its customers. In response thereto, a public comment meeting was
6 held in Bullhead City, Arizona, on April 28, 1993.

7 On May 3, 1993, RUCO filed a motion to dismiss NMVC's application
8 herein.

9 The matter came on for hearing before a duly authorized Hearing
10 Officer of the Commission at the Commission's offices in Phoenix,
11 Arizona, on May 4, 1993. Applicant, the Commission's Utilities
12 Division ("Staff") and RUCO appeared with counsel. Evidence was
13 presented, and after a full public hearing, the matter was taken under
14 advisement pending submission of a Recommended Opinion and Order by
15 the Presiding Officer to the Commission.

16 DISCUSSION

17 NMVC is an Arizona corporation that provides water utility
18 service to the public in Bullhead City, Mohave County, Arizona,
19 pursuant to Decision Nos. 46690 (January 20, 1976) and 54285 (December
20 20, 1984)¹. During the test year ("TY") ended December 31, 1991,
21 Applicant provided water service to an average of 347 primarily
22 residential customers.

23 NMVC was last authorized to increase its rates and charges in
24 Decision No. 57021 (July 18, 1990). In Decision No. 57021, the
25 Commission found that NMVC would not have sufficient revenue to cover
26

27 ¹ NMVC is owned equally by members of the McCormick and
28 Landon families, who are partners in a joint venture known as XLC-
McCormick ("XLC") which is heavily engaged in the development of
NMVC's certificated service area.

1 its operating expenses until it had at least 500 customers. At
2 present, Applicant has approximately 400 customers.

3 The Commission, in Decision No. 57021, ordered NMVC to file,
4 within 24 months of the effective date of the rates authorized
5 therein, another application for rate relief. Pursuant to the
6 Commission's order, the instant application was submitted. The record
7 establishes that, from the outset, Applicant is experiencing a
8 substantial operating loss, even as approximately 70 customers a year
9 continue to move into its service area with the continuing expansion
10 of the Bullhead City, Arizona area.

11 Although NMVC's original certificated service area was planned
12 for approximately 1,400 customers, two recent Commission decisions
13 have drastically altered the size of its certificated service area and
14 the number of customers that it will have both in the immediate future
15 and several years from now.

16 In Decision No. 57989 (August 26, 1992) the Commission authorized
17 the extension of NMVC's Certificate of Convenience and Necessity
18 ("Certificate") to include approximately 345 acres for commercial
19 development and an additional three sections of land which at some
20 point, years in the future, are projected to have approximately 10,000
21 more residential customers. The area contains the expanded Bullhead
22 City Airport and is slated to have an industrial parkway developed.

23 In Decision No. 57992 (August 26, 1992) the Commission authorized
24 Thumb Butte Water Association, Inc. ("Thumb Butte") to sell its assets
25 and transfer its Certificate to NMVC. Thumb Butte has approximately
26 350 customers immediately adjacent to NMVC's existing certificated
27 service area and although the acquisition has not yet been completed,
28 upon its conclusion, estimated to be approximately September 1, 1993,

1 NMVC will double its customer base to approximately 750. The
2 explosive growth of Applicant's customer base will change NMVC's
3 financial picture, even though the Commission ordered NMVC to continue
4 to charge Thumb Butte's existing rates and charges authorized in
5 Decision No. 52608 (November 19, 1981).

6 The impending increase in NMVC's revenues with a purported
7 economy of scale of its operating expenses is what occasioned RUCO's
8 Motion to Dismiss NMVC's application herein. Based on the undisputed
9 evidence that Applicant is continuing to suffer substantial losses, we
10 do not believe that the dismissal of the application herein is the
11 proper action to take in this instance and we shall proceed with the
12 disposition of this application based on its merits. However, while
13 it is clear that the picture will change sharply for NMVC when the
14 revenues from Thumb Butte's customers begin to flow to NMVC, we are
15 without any clear evidence as to how this will effect Applicant's
16 financial position. Because of this impending change, our disposition
17 in this case will be conditioned upon Applicant filing, 18 months from
18 the conclusion of the Thumb Butte acquisition, a new rate application
19 which properly reflects the combined revenues and expenses of NMVC as
20 it then exists.

21 The major areas of difference between Applicant, Staff, and RUCO
22 with respect to the application herein arise in the areas of rate
23 base, officers' salaries, employee salaries, depreciation expense and
24 professional fees, with several other minor differences.

25 RATE BASE

26 The single largest area of dispute in the proceeding involves the
27 issue of Applicant's rate base. Applicant has calculated that its
28 Original Cost Rate Base ("OCRB") is \$487,682. Staff, after making its

1 adjustments, reduced NMVC's OCRB to \$469,300. The main adjustment
2 made by Staff was to increase accumulated depreciation by over \$15,000
3 (which reduces rate base by a like amount) and a reduction of cash
4 working capital by over \$2,000.² Staff also reduced rate base by
5 \$3,500 with the removal of Well No. 3 from Applicant's OCRB because it
6 is not in service.

7 RUCO made a significant adjustment to Applicant's OCRB by
8 reducing it from \$487,682 to \$94,640 and urging that the Commission
9 not recognize NMVC's proposed rate base because it includes pro forma
10 plant which RUCO argues is not currently used and useful to provide
11 service to its customers. It is RUCO's position that a large portion
12 of NMVC's plant, including Well No. 3, is not used and useful, since
13 Applicant's current customers utilize less than 20% of the capacity of
14 the plant's distribution system. RUCO proposes reducing NMVC's rate
15 base by \$383,443.

16 During the proceeding, ample evidence was presented by NMVC's
17 president, Mr. Frank Landon, an eminently qualified engineer, and by
18 Staff with regard to the contention that NMVC's entire utility plant
19 is used and useful in order to provide service to its existing
20 customers. NMVC's customers are spread out over a large service area
21 and the system was constructed with a lengthy distribution system in
22 a double loop fashion to provide ample pressure to its customers who
23 are situated at varying elevations and to meet the fire regulations of

24
25 ² The increase in accumulated depreciation is caused by
26 additions and improvements to NMVC's utility plant which were funded
27 by a related entity, XLC, a joint venture, which is controlled by
28 the officers of NMVC. The Commission in Decision No. 57996 (August
26, 1992) authorized the issuance of \$722,650 in voting, Class A
common stock in return for the additional utility plant, but this
transaction has not yet been concluded. Although the utility plant
has been turned over to the Applicant, the stock has not yet been
issued and should be since the additions are used by NMVC.

1 the Bullhead City Fire Department.

2 RUCO failed to present any engineering testimony to support its
3 position concerning used and useful. It instead proposed the adoption
4 of a reduced rate base using a percentage basis for establishing that
5 portion of Applicant's plant which it termed is not used and useful.
6 Neither RUCO nor Staff argued that Applicant has excess capacity in
7 terms of a lengthy distribution system, too many wells or too much
8 storage capacity.

9 Based on the record, we shall adopt Staff's recommendation with
10 regard to NMVC's OCRB being set at \$469,300 and for purposes of this
11 proceeding it will be treated as its Fair Value Rate Base ("FVRB").

12 OPERATING INCOME

13 REVENUES

14 The record establishes that NMVC has been heavily subsidized by
15 XLC or McCormick Properties II ("MP II"), another related development
16 entity, for a number of years. The monies advanced were used for
17 working capital requirements and ordinary operating expenses. At the
18 end of the TY Applicant had a current liability of approximately
19 \$321,000 due to the subsidization, but this sum has now grown to
20 \$421,000. However, Applicant's accountant has indicated that XLC can
21 no longer advance additional monies to NMVC because XLC's lending
22 institutions have instituted a prohibition against further advances.
23 Although Applicant has not previously sought financing approval from
24 the Commission for this debt, it will do so in the future.

25 According to Applicant, its operating revenues for the TY were
26 \$161,357. Although NMVC made a proforma adjustment of \$15,063 for
27 customer growth by simply doubling residential revenues for the last
28 six months of the TY, Staff found that it was more accurate to

1 consider growth after the TY because it is a known and measurable
2 change. This resulted in a positive adjustment by Staff of \$4,068
3 (based on customer growth through June 1992) increasing Applicant's
4 revenues to \$165,425 for the TY with adjustments also made to related
5 operating expenses. According to RUCO, NMVC realized TY operating
6 revenues of \$173,266 based on its adjustment for the annualization of
7 revenues of \$11,909, but failed to make a necessary corresponding
8 adjustment to related expenses. This creates a mismatch between
9 revenues and related expenses.

10 In this instance, since we shall be making other adjustments for
11 known and measurable changes to NMVC's operating expenses, it would be
12 consistent to analyze the revenues realized by NMVC using Staff's TY
13 results. RUCO's witness, in making her adjustment of \$11,909, pointed
14 out that she believes that NMVC will be experiencing a decrease in
15 construction water revenues of approximately \$5,641 because a large
16 portion of that usage has ceased within Applicant's service area. We
17 shall consider this factor later when we determine Applicant's revenue
18 needs. As a result, we concur with Staff and find the adjusted TY
19 revenues for Applicant to be \$165,425.

20 EXPENSES

21 Based on NMVC's application, Applicant had adjusted TY operating
22 expenses of \$280,073. Staff recommended increasing Applicant's TY
23 operating expenses by \$13,902. RUCO recommended reductions of
24 \$61,889.

25 The largest area of dispute with regard to NMVC's operating
26 expenses involves depreciation expense. While Applicant proposed
27 depreciation expense of \$70,687 for the TY, Staff increased
28 depreciation expense by \$20,945 to \$91,632 due to its pro forma

1 adjustment to Applicant's plant in service. Consistent with RUCO's
2 position concerning Applicant's rate base, RUCO reduced NMVC's claimed
3 depreciation expense by \$33,169 to \$37,518.

4 We agree with Staff's recommendation. We will allow the sum of
5 \$91,632 to be claimed for depreciation expense in this proceeding.

6 Another area involving a significant dispute in Applicant's
7 expense category is that of officers' salaries. NMVC's exhibit
8 indicates that Mr. John McCormick III, NMVC's treasurer and on-site
9 manager, was paid \$30,000 during the TY period. Staff reduced the
10 expenses claimed for officers' salaries to \$20,718, but RUCO did not
11 contest this expense.

12 Mr. McCormick stated that he earns \$120,000 a year and that he
13 spends 25% of his time on NMVC's business and that the \$30,000
14 represents Applicant's portion of his salary. The other 75% of his
15 salary comes from related entities involved in the development of
16 property in NMVC's certificated service area. Staff argued that Mr.
17 McCormick's salary level is unreasonably high for rate making purposes
18 because it represents a 67% increase from the \$18,000 allowed in
19 NMVC's prior rate case, which had a TY ending December 31, 1988.
20 Staff has determined that a reasonable approach is to increase his
21 salary to \$20,718 reflecting changes in the United States Consumer
22 Price Index through 1991.

23 We concur with Staff's treatment of this expense. The Applicant
24 has failed to justify such a large salary increase during times of low
25 inflation.

26 Both Staff and RUCO made significant adjustments to NMVC's
27 claimed salary expenses of \$41,281 for the TY. Staff has recommended
28 the disallowance of a pro forma adjustment of \$10,000 made by

1 Applicant for the anticipated cost of an additional field employee.
2 RUCO concurred with this Staff recommendation, but during the
3 proceeding it became apparent that this expense item would have to be
4 further dealt with because Applicant at one point employed a certified
5 operator that had a grade 2 operator's license and was a contract
6 employee earning \$14,400 a year. This individual no longer works for
7 NMVC. Currently, NMVC employs a certified operator who earns \$2,400
8 a month (\$28,800 a year). However, the record establishes that this
9 employee only works approximately 60% of the time for NMVC and is
10 employed for the balance of the time at Thumb Butte for which NMVC
11 receives no compensation. For this reason, we shall only recognize
12 \$17,280 (60%) as a TY expense for a certified operator.

13 While Staff made no other reduction to Applicant's salary
14 expenses, RUCO recommended that \$2,934 for a part-time clerk that was
15 employed during the TY be disallowed because she is no longer employed
16 by NMVC. RUCO also recommends that the Commission disallow \$782 for
17 work done by two field workers on a temporary basis and wages of
18 \$5,416 for miscellaneous field labor be disallowed because they are
19 not normal recurring salary and wage expenses. We concur with RUCO's
20 recommendations with regard to the aforementioned salary expenses as
21 they relate to the part-time office clerk, temporary field workers,
22 and miscellaneous field labor.

23 Additionally, as a result of our allowing \$17,280 for the payment
24 of NMVC's certified operator, we shall disallow claimed TY expenses of
25 \$14,400 for contract labor which in the past was normally allocated
26 for Applicant's certified operator. Therefore, we find that NMVC's
27 adjusted salary expenses for the TY should include \$17,280 for its
28 certified operator and \$19,065 for its office manager for a total of

1 \$36,345.

2 Staff also recommended reductions to Applicant's general
3 insurance expense (\$797); office expense (\$263); equipment rental
4 (\$487) (but increased its vehicle expense account by a like amount);
5 and telephone expense (\$418); for a total of \$1,478. RUCO recommended
6 an additional reduction of \$287 from Applicant's office expense
7 account because it was used to pay for an employee's college expenses.
8 We concur with and find reasonable these additional adjustments to
9 NMVC's operating expenses in the amount of \$1,765 as recommended by
10 Staff and RUCO.

11 Additionally, Staff increased the Applicant's pumping power
12 expense by \$10,164 in order to reflect the actual customer growth
13 through June 1992 and to match its earlier adjustment increasing
14 residential revenues to reflect customer growth.

15 Staff recommended increasing NMVC's professional fees expense by
16 \$1,493 and amortizing Applicant's rate case expense over two years, an
17 expense of \$2,060 per year. RUCO recommended a reduction in this
18 account of \$8,212. The adjustment proposed by RUCO consists of \$7,524
19 related to legal fees with regards to the Thumb Butte acquisition and
20 \$688 related to accounting fees for that acquisition which were not
21 properly deferred. Since NMVC's customers will ultimately benefit
22 from the acquisition of Thumb Butte because of the increased revenues
23 which will be realized by Applicant, we believe that the professional
24 fees disputed by RUCO should be allowed, as should the rate case
25 expense recommended by Staff. However, while rate case expense should
26 be amortized over 24 months, the disputed acquisition costs should be
27 amortized over a period of 60 months.

28 After our adjustments to NMVC's TY operating expenses, Applicant

1 is found to have adjusted TY operating expenses of \$277,782.

2 We also note that Staff has recommended that NMVC file a separate
3 financing application for the approval of advances made to the
4 Applicant of in excess of \$421,000. We concur with Staff and have not
5 considered the interest expense related to this long-term liability to
6 be considered in determining revenue requirements to be recovered
7 through rates at this time. Although NMVC's balance sheet reflects
8 these advances as a current liability, they should be reclassified as
9 a long-term liability until repayment terms are established and are
10 approved by the Commission.

11 REVENUE REQUIREMENTS AND RATE DESIGN

12 Based on NMVC's application, the Applicant seeks an increase in
13 revenues of \$98,800. According to NMVC, its proposed revenue increase
14 is projected to result in a \$19,916 operating loss, but will result in
15 a positive cash flow of \$50,771. Staff is recommending a total
16 increase in revenues of \$34,858. Staff's proposal for increasing
17 NMVC's revenue is projected to result in a \$93,692 operating loss, but
18 will result in almost a break-even cash flow. RUCO has proposed
19 increasing the Applicant's revenues by \$55,871. RUCO's proposed
20 revenue increase is projected to produce \$8,518 in operating income,
21 but it is premised on a substantial reduction to Applicant's
22 depreciation expense of \$33,169.

23 NMVC's proposed rates are based on a zoned rate structure which
24 was approved by the Commission in Decision No. 57021 and which was
25 designed to reflect a cost differential of providing service to
26 customers at varying elevations. NMVC proposed a 6 tier commodity
27 rate structure versus the present 2 tier commodity rate structure.

28 Staff did not recommend a zone rate structure in this case

1 because it believes that Applicant's proposed rates will be difficult
2 to understand and difficult to apply to its customers' bills.
3 Further, Staff does not believe that the slight financial impact
4 caused by zone rates on rate payers warrants the complexity involved
5 in its design, implementation and acceptability. The record also
6 establishes that there will be no significant cost subsidization
7 between customers in different elevations if zone rates are
8 eliminated.

9 RUCO recommended a single minimum charge for each meter size
10 regardless of zone level, coupled with the establishment of a second
11 tier related to each meter size with a related increased commodity
12 charge. RUCO recommended this form of rate structure because it also
13 finds Applicant's use of 6 tier levels and 5 zone levels to be
14 needlessly complex. However, RUCO recommended that NMVC's proposed
15 ten cent zone differential charge per 1,000 gallons should be adopted
16 because it believes that the charge is reasonable based on the cost of
17 pumping water to the various zones.

18 Based on our review of the evidence, we do not believe that the
19 record supports the continuation of Applicant's zone rates nor the
20 imposition of a 6 tier commodity charge. Further, we do not find that
21 the record supports the imposition of a ten cent zone differential
22 charge as supported by RUCO. Based on Staff's evidence, this charge
23 is not merited at this time. Additionally, with the acquisition of
24 Thumb Butte, it appears that NMVC's financial circumstances should
25 show a substantial change and we believe that a simplified rate
26 structure similar to that proposed by Staff will aid in our future
27 analysis of NMVC's operations. In establishing NMVC's rates
28 hereinafter, we shall adopt a simplified rate structure and in the

1 future consider the cost of service, rate continuity and rate unity in
2 designing Applicant's rates in its next rate case.

3 Under the circumstances herein, we generally concur with Staff's
4 recommendations subject to the adjustments discussed hereinabove. We
5 shall authorize rates which will enable NMVC to offset its increasing
6 expenses and will enable NMVC to continue utility operations.
7 However, we shall also require Applicant to file, within 18 months
8 from the date that Thumb Butte is merged into its operating system,
9 but not later than June 1, 1995, a rate application so that the
10 Commission can at that time re-examine NMVC's financial circumstances.

11 * * * * *

12 Having considered the entire record herein and being fully
13 advised in the premises, the Commission finds, concludes, and orders
14 that:

15 FINDINGS OF FACT

16 1. Pursuant to authority granted by the Commission in Decision
17 Nos. 46690 and 54285, NMVC is an Arizona Corporation engaged in
18 providing public water utility service in the northern limits of
19 Bullhead City, Mohave County, Arizona.

20 2. NMVC's existing rates and charges were established by
21 Decision No. 57021.

22 3. On November 10, 1992, NMVC filed with the Commission an
23 application requesting that the Commission determine the fair value of
24 its property for rate making purposes, fix a just and reasonable rate
25 of return thereon and thereafter approve rate schedules designed to
26 produce said return.

27 4. On December 28, 1992, the Commission issued a Procedural
28 Order setting this matter for hearing on May 4, 1993.

1 5. On April 1, 1993, NMVC notified its customers of the hearing
2 which had been scheduled on the application.

3 6. On May 3, 1993, RUCO filed a Motion to Dismiss NMVC's
4 application herein.

5 7. During the TY ended December 31, 1991, NMVC served an
6 average of 347 metered customers.

7 8. For the TY, NMVC had adjusted operating revenues of \$165,425
8 and adjusted operating expenses of \$293,975 resulting in an operating
9 loss of \$128,550.

10 9. The rates and charges for NMVC at present, as proposed in
11 the application and, as recommended by Staff and RUCO are follows:

	Present Rates*	--Proposed Rates-- NMVC				Staff
		Zone 1	Zone 2	Zone 3	Zone 4***	
<u>Monthly Minimum Charge:</u>						
5/8" x 3/4" Meter	\$ 7.25	\$ 10.00	\$ 10.10	\$ 10.20	\$ 10.30	\$ 9.00
3/4" Meter	7.25	10.00	10.10	10.20	10.30	9.00
1" Meter	10.00	22.50	23.50	24.50	25.50	15.00
1 1/2" Meter	15.00	30.00	31.00	32.00	33.00	30.00
2" Meter	20.00	40.00	41.00	42.00	43.00	48.00
3" Meter	30.00	60.00	62.50	65.00	67.50	90.00
4" Meter	60.00	80.00	85.00	90.00	95.00	150.00
5" Meter	100.00	115.00	125.00	135.00	145.00	240.00
6" Meter	140.00	160.00	175.00	190.00	205.00	300.00
<u>Gallons Included in Minimum:</u>						
All Meter Sizes	1,000	N/A	N/A	N/A	N/A	1,000
5/8"x 3/4", 3/4", 1" & 1 1/2" Meters	N/A	2,000	2,000	2,000	2,000	N/A
2", 3", 4", 5", & 6" Meters	N/A	5,000	5,000	5,000	5,000	N/A
<u>Excess of Minimum - Per 1,000 Gallons</u>						
<u>All Meter Sizes</u>						
0 to 5,000 Gallons	\$1.50**	N/A	N/A	N/A	N/A	N/A
Over 5,000 Gallons	1.75**	N/A	N/A	N/A	N/A	N/A
<u>All Meter Sizes</u>						
0 to 5,000 Gallons	N/A	\$2.00	\$2.10	\$2.20	\$2.30	N/A
5,001 to 25,000 Gallons	N/A	2.50	2.60	2.70	2.80	N/A
25,001 to 50,000 Gallons	N/A	2.55	2.65	2.75	2.85	N/A
50,001 to 75,000 Gallons	N/A	2.60	2.70	2.80	2.90	N/A
75,001 to 100,000 Gallons	N/A	2.65	2.75	2.85	2.95	N/A
Over 100,000 Gallons	N/A	2.70	2.80	2.90	3.00	N/A

1	<u>All Meter Sizes</u>						
2	0 to 9,000 Gallons	N/A	N/A	N/A	N/A	N/A	\$2.00
3	Over 9,000 Gallons	N/A	N/A	N/A	N/A	N/A	2.75
3	Construction Usage (Per 1,000 Gallons)	\$0.80	\$1.25	\$1.35	\$1.45	\$1.55	\$0.97

- 4 * Add \$0.05 per month to the previous zone for all meter sizes.
- 5 ** Add \$0.05 per month to the previous zone for all meter sizes.
- 6 *** NMVC has proposed that its Zone 5 rates be the same as Zone 4.

--Proposed Rates--

	<u>RUCO</u>	<u>SECOND TIER</u>
7 <u>Monthly Minimum Charge:</u>		
8 <u>(includes 1,000 Gallons)</u>		
9 5/8" x 3/4" Meter	\$ 7.10	10,000
10 3/4" Meter	9.60	12,000
11 1" Meter	14.70	16,000
12 1 1/2" Meter	27.30	90,000
13 2" Meter	42.50	125,000
14 3" Meter	90.60	150,000
15 4" Meter	153.90	200,000
16 5" Meter	221.80	300,000
17 6" Meter	318.50	425,000

	<u>FIRST TIER</u>	<u>SECOND TIER</u>
13 <u>COMMODITY CHARGE IN EXCESS OF THE MINIMUM</u>		
14 <u>(Per 1,000 Gallons)</u>	\$2.00	\$2.60

15 <u>Zone Rate Differential Excluding Water</u>	
16 <u>in the Minimum (Per 1,000 Gallons)</u>	\$0.10

17 <u>Construction Usage</u>	
18 <u>(Per 1,000 Gallons)</u>	\$1.25

	<u>Present Rates</u>	<u>--Proposed Charges --</u>	
		<u>NMVC</u>	<u>Staff</u>
19 <u>Service Line and Meter Installation Charges:</u>			
20 <u>(Refundable pursuant to A.A.C. R14-2-405)</u>			
21 5/8" x 3/4" Meter	\$ 125	\$ 125	\$ 125
22 3/4" Meter	125	125	125
23 1" Meter	180	250	250
24 1 1/2" Meter	380	425	425
25 2" Meter	520	650	650
26 3" Meter	925	1,100	1,100
27 4" Meter	1,550	1,750	1,750
28 5" Meter	2,700	3,000	3,000
	2,825	3,500	3,500

26 . . .
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1	<u>Service Charges:</u>			
	Establishment	\$25.00	\$25.00	\$25.00
2	Establishment (After Hours)	40.00	40.00	40.00
	Reconnection (Delinquent)	40.00	40.00	40.00
3	Meter Test (If Correct)	25.00	25.00	25.00
	Meter Reread (If Correct)	15.00	15.00	15.00
4	NSF Check	15.00	20.00	15.00
	Deposit	*	*	*
5	Deposit Interest	**	**	**
	Late Payment Penalty	N/A	***	***
6	Re-Establishment (Within 12 Months)	****	****	****
	Cross-Connection Control(Non-Refundable Permit Fee)	N/A	*****	10.00

- 7
- 8 * Pursuant to A.A.C. R14-2-403(B)(7).
- 9 ** Pursuant to A.A.C. R14-2-403(B)(3).
- 10 *** Pursuant to A.A.C. R14-2-608(F).
- 11 **** Pursuant to A.A.C. R14-2-403(D)., number of months off the system times the monthly minimum.
- 12 ***** Pursuant to separate tariff schedule.

13 10. Although NMVC proposed a rate of return of 9%, it
 14 acknowledged that this would require a rate increase of approximately
 15 75% to its existing customers and Applicant recognizes that its
 16 customers could not absorb such an increase, and therefore, is
 17 primarily seeking rate relief which will enable it to have a positive
 18 cash flow.

19 11. For purposes of this proceeding the OCRB of \$469,300 is
 20 determined to be the FVRB.

21 12. Applicant has failed to issue stock in return for
 22 improvements made to its utility plant within its existing
 23 certificated area pursuant to Decision No. 57996.

24 13. Due to Applicant's losses, it has required subsidization
 25 from related entities XLC and MP II.

26 14. The record establishes that NMVC can no longer rely on
 27 continued subsidization by its related entities because their banks
 28 will no long permit such advances.

15. The rates and charges that Applicant proposed would produce
 operating revenues of \$260,157 and operating expenses of \$280,073,

1 resulting in an operating loss of \$19,916.

2 16. The rates and charges Staff recommended would produce
3 operating revenues of \$200,283 and adjusted operating expenses of
4 \$293,975, resulting in an operating loss of \$93,692.

5 17. Applicant's proposed rates would increase the average
6 residential monthly customer bill by 24.8%, from \$17.47 to \$21.80, and
7 the median residential monthly customer bill by 19.7%, from \$11.35 to
8 \$13.59.

9 18. Staff's proposed rates would increase the average
10 residential monthly customer bill by 22.8%, from \$17.47 to \$21.45, and
11 the median residential monthly customer bill by 24.1%, from \$11.35 to
12 \$14.09.

13 19. RUCO's proposed rates would increase the average residential
14 monthly customer bill by 21.9%, from \$19.92 to \$24.27.³

15 20. Although the Commission previously approved the use of zone
16 rates for Applicant in Decision No. 57021, we do not believe that they
17 are appropriate at this time because the record does not establish
18 large cross subsidizations by other customers in lower zones and a
19 more simplified rate design as recommended by Staff will assist us in
20 our evaluation of Applicant's next rate application.

21 21. We shall adopt Staff's recommendations with regard to the
22 monthly minimum charges and shall make adjustments to Staff's
23 recommended gallonage charges.

24 22. Additionally, since it appears that the sale of construction
25 water by NMVC will be decreasing, we shall adopt RUCO's recommendation
26 with regards to the charge for construction water at \$1.25 per 1,000
27

28 ³ RUCO did not submit data with regard to the median residential monthly customer bill.

1 gallons to maintain this level of revenue.

2 23. Under the circumstances of this proceeding, and coupled with
3 the fact of the impending acquisition of Thumb Butte, we concur with
4 Staff's recommendation to get NMVC to a break-even cash flow by
5 increasing NMVC's operating revenues by \$21,482, which will reduce its
6 operating losses and produce a slight positive cash flow due to
7 depreciation expense of \$91,632.

8 24. The rates which we authorize hereinafter will produce
9 operating revenues of \$186,907 and operating expenses of \$277,782,
10 resulting in an operating loss of \$90,875.

11 25. The rates which we authorize hereinafter will increase the
12 average residential customer monthly bill by 12.4%, from \$17.47 to
13 \$19.64, and the median residential customer monthly bill by 17.6%,
14 from \$11.35 to \$13.35.

15 26. The rates which we authorize hereinafter should enable the
16 Applicant to reach a break-even point with its known and measurable
17 expenses discussed hereinabove, but because of the Thumb Butte
18 acquisition and resulting increase in revenues we shall require
19 Applicant to file, 18 months from the completion of the Thumb Butte
20 acquisition, but not later than June 1, 1995, a rate application
21 utilizing a TY ending December 31, 1994.

22 27. NMVC should comply with Decision No. 57996 within 30 days of
23 the effective date of this Decision as previously discussed
24 hereinabove.

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CONCLUSIONS OF LAW

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1. Applicant is public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-250 and 40-251.

2. Notice of NMVC's application for the approval of increased rates and charges was given in accordance with the law.

3. The Commission has jurisdiction over NMVC and of the subject matter of the application.

4. The rates and charges authorized herein below are just and reasonable and should be approved.

5. NMVC should comply with Decision No. 57996 and issue the 722,650 shares of voting Class A common stock authorized therein.

ORDER

IT IS THEREFORE ORDERED that North Mohave Valley Corporation is hereby directed to file on or before September 1, 1993, a revised schedule setting forth the following rates and charges:

MINIMUM MONTHLY CHARGE:
(Includes 1,000 Gallons)

5/8" x 3/4" Meter	\$ 9.00
3/4" Meter	9.00
1" Meter	15.00
1 1/2" Meter	30.00
2" Meter	48.00
3" Meter	90.00
4" Meter	150.00
5" Meter	240.00
6" Meter	300.00

EXCESS OF MINIMUM - PER 1,000 GALLONS:

1001 to 9,000 Gallons	\$ 1.71
9,001 Gallons and above	2.46

Construction Usage:
(Per 1,000 Gallons)

\$ 1.25

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. . .

SERVICE LINE AND METER INSTALLATION CHARGES:

	(Refundable pursuant to A.A.C. R14-2-405)	\$ 125.00
2	5/8" x 3/4" Meter	125.00
	3/4" Meter	250.00
3	1" Meter	425.00
	1 1/2" Meter	650.00
4	2" Meter	1,100.00
	3" Meter	1,750.00
5	4" Meter	3,000.00
	5" Meter	3,500.00
6	6" Meter	

SERVICE CHARGES:

7	Establishment	\$ 25.00
8	Establishment (After Hours)	40.00
	Reconnection (Delinquent)	40.00
9	Meter Test (If Correct)	25.00
	Meter Reread (If Correct)	15.00
10	NSF Check	15.00
	Deposit	*
11	Deposit Interest	**
	Late Payment Penalty	***
12	Re-Establishment (Within 12 Months)	****
	Cross-Connection Control	10.00
13	(Non-Refundable Permit Fee)	

* Pursuant to A.A.C. R14-2-403(B)(7).

** Pursuant to A.A.C. R14-2-403(B)(3).

*** Pursuant to A.A.C. R14-2-608(F).

**** Pursuant to A.A.C. R14-2-403(D).

IT IS FURTHER ORDERED that the rates and charges authorized hereinabove shall be effective for all services rendered on and after September 1, 1993.

IT IS FURTHER ORDERED that North Mohave Valley Corporation shall notify its customers of the rates and charges authorized hereinabove and the effective date of same by means of an insert in its next regular monthly billing.

IT IS FURTHER ORDERED that North Mohave Valley Corporation shall include in its tariff a provision for the flow-through of the proportionate state and local taxes in accordance A.A.C. R14-2-409(D)(5).

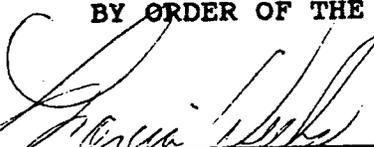
IT IS FURTHER ORDERED that North Mohave Valley Corporation shall,

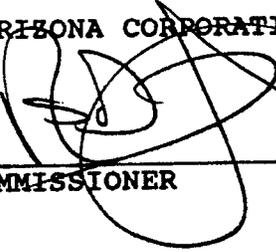
1 within 30 days of the effective date of this Decision, file an
2 affidavit with the Director of the Commission's Utilities Division
3 confirming the issuance of the 722,650 in voting, Class A common stock
4 pursuant to Decision No. 57996.

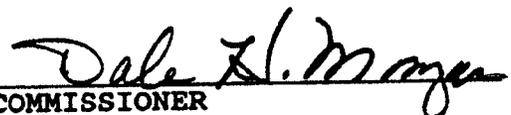
5 IT IS FURTHER ORDERED that North Mohave Valley Corporation shall
6 file, 18 months from the completion of the Thumb Butte Water
7 Association, Inc., acquisition, but not later than June 1, 1995, a
8 rate application utilizing a TY ending December 31, 1994.

9 IT IS FURTHER ORDERED that this Decision shall become effective
10 immediately.

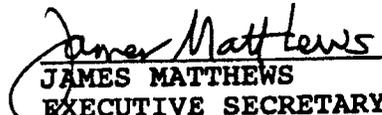
11 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

12
13 
14 CHAIRMAN

12
13 
14 COMMISSIONER

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13 
14 COMMISSIONER

15 IN WITNESS WHEREOF, I, JAMES MATTHEWS,
16 Executive Secretary of the Arizona
17 Corporation Commission, have hereunto set my
18 hand and caused the official seal of the
19 Commission to be affixed at the Capitol, in
20 the City of Phoenix, this 3 day of
21 September, 1993.

22 
23 JAMES MATTHEWS
24 EXECUTIVE SECRETARY

25 DISSENT _____
26 MES:dap
27
28

1 SERVICE LIST FOR: NORTH MOHAVE VALLEY CORPORATION

2 DOCKET NO.: U-2259-92-318

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